

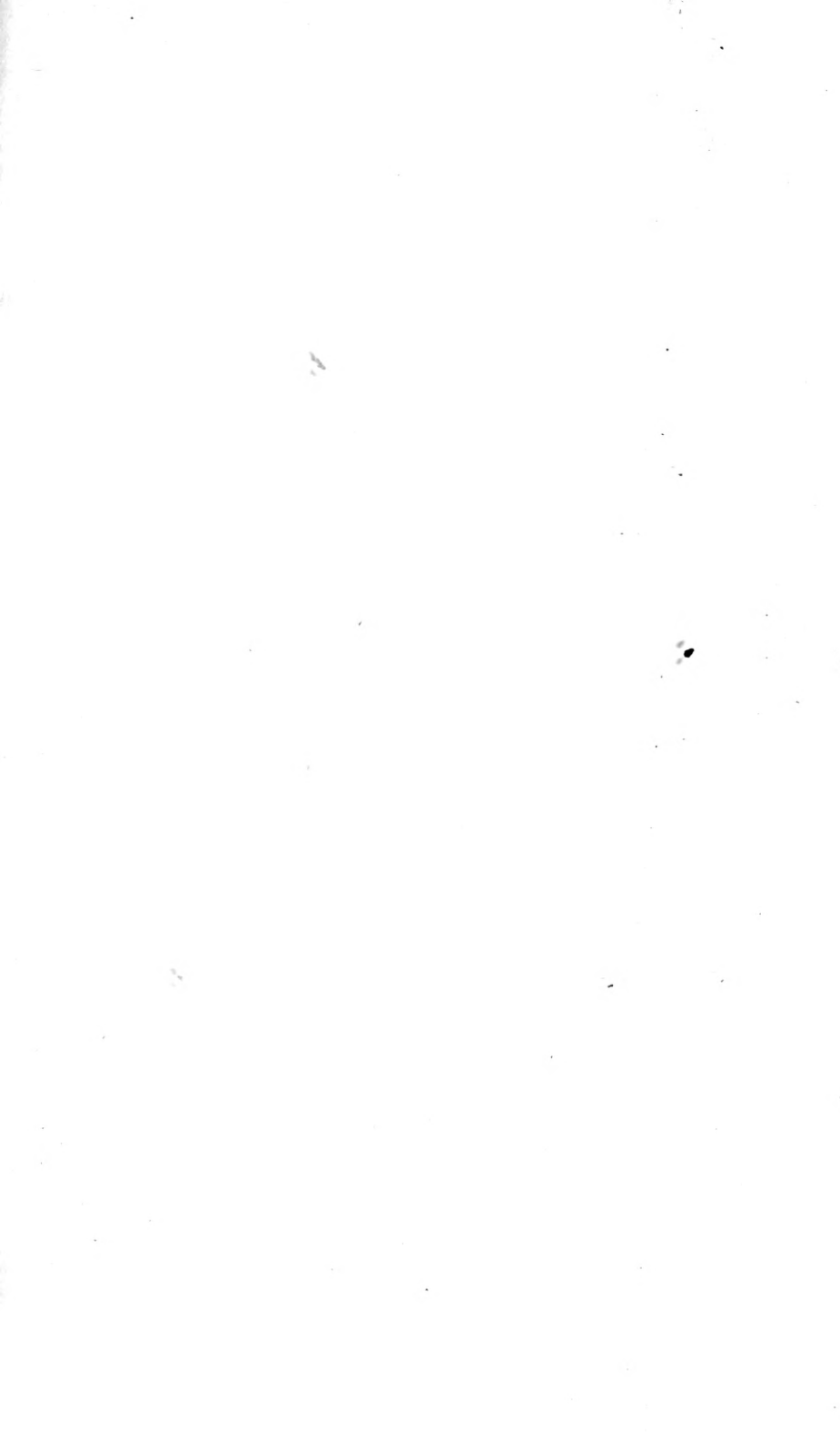


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THE HISTORY 8133

OF

NEW-HAMPSHIRE.

COMPREHENDING

The Events of one complete Century and seventy-five years from the discovery of the River Pascataqua to the year one thousand seven hundred and ninety.

CONTAINING ALSO,

A GEOGRAPHICAL DESCRIPTION OF THE STATE,

WITH

SKETCHES OF ITS NATURAL HISTORY, PRODUCTIONS,
IMPROVEMENTS, AND PRESENT STATE OF
SOCIETY AND MANNERS, LAWS,
AND GOVERNMENT.

BY JEREMY BELKNAP, D. D.

Member of the American Philosophical Society held at Philadelphia, for promoting useful knowledge, and of the Academy of Arts and Sciences in Massachusetts.

THE SECOND EDITION,

WITH LARGE ADDITIONS AND IMPROVEMENTS, PUBLISHED FROM THE
AUTHOR'S LAST MANUSCRIPT.

ILLUSTRATED BY A MAP.

Tempus edax rerum, tuque invidiosa vetustas
Omnia destruitis: vititque dentibus ævi
Paulatim lenta consumitis omnia morte.
Hæc perstant.

OVID.

VOL. III.

BOSTON:

PUBLISHED BY BRADFORD AND READ.

1813.

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516 111

DISTRICT OF MASSACHUSETTS, TO WIT :

District Clerk's Office.

BE IT REMEMBERED, That on the eighteenth day of June, A. D. 1813, and in the thirty-seventh year of the Independence of the United States of America, **BRADFORD & READ**, of the said District, have deposited in this Office the title of a book, the right whereof they claim as Proprietors, in the words following, *to wit* :

The History of New-Hampshire. - Comprehending the events of one complete century and seventy-five years from the discovery of the river Pascataqua to the year one thousand seven hundred and ninety. Containing also, a geographical description of the State, with sketches of its natural history, productions, improvements, and present state of society and manners, laws, and government. By **JEREMY BELKNAP**, D.D. member of the American Philosophical Society held at Philadelphia, for promoting useful knowledge, and of the Academy of arts and sciences in Massachusetts. The second edition, with large additions and improvements, published from the author's last manuscript. Illustrated with a map.

Tempus edax rerum, tuque invidiosa vetustas
Omnia destruitis : vititque dentibus ævi
Paulatim lenta consumitis omnia morte.
Hæc perstant. **OVID.**

In conformity to the Act of the Congress of the United States, entitled, "An Act for the encouragement of learning, by securing the copies of Maps, Charts and Books, to the Authors and Proprietors of such copies, during the times therein mentioned;" and also to an Act entitled, "An Act supplementary to an Act, entitled, an Act for the encouragement of learning, by securing the copies of Maps, Charts and Books, to the Authors and Proprietors of such copies during the times therein mentioned ; and extending the benefits thereof to the arts of designing, engraving, and etching historical and other Prints."

WILLIAM S. SHAW, } *Clerk of the District
of Massachusetts.*

PREFACE.

THE materials of which this part of the History of New-Hampshire is composed, were chiefly collected during a residence of twenty-two years in the eastern part of the State; from observations made in various places, and particularly in several journies to the northern and western parts; from original surveys of many townships and tracts of the Country; from the conversation of many persons who have been employed in surveying, mast-making, hunting and scouting; as well as in husbandry, manufactures, merchandise, navigation and fishery. The public offices have also been repeatedly searched, and the obliging attention of the officers of government, both in New-Hampshire and Massachusetts, is again thankfully acknowledged. But that no source of information might be left unexplored, a printed circular letter was addressed to the several Clergymen, and other gentlemen of public character, in all parts of the State, requesting their communications on various heads of inquiry. The answers to these letters have not been so numerous, and in some instances, not so particular as would have been agreeable; but from those which have been received (and for which the Author requests the several writers to accept his thanks) he has been enabled to render his account more complete than it could have been without this assistance.

The chapter containing a description of the white mountains, is a copy, with some enlargements, of a memoir presented to the Philosophical Society of Philadelphia, and published in the second volume of their transactions. This memoir was quoted in the London Monthly Review, for February, 1787 p. 139 ; and the word *freshet* occurring in it, the Reviewers added this note, " We are not acquainted with this word." In the next number, a correspondent kindly attempted to correct, what he imagined to be 'an error of the 'press,' by substituting the word *fresh* in its place ; meaning a tide or flowing of fresh in distinction from salt water. But the Reviewers were not satisfied that there was any error of the press ; and in fact there was not ; the word *freshet* is a term familiar to the people of New-England, as it was to their fore-fathers, who brought it from England, where it was equally familiar in the last century.

From the following authorities it may be seen how the nouns *freshet* and *freshes* were used by writers of the last, and beginning of the present, century.

The former is found in Milton's *Paradise Regained*, Book II. line 345.

' All fish from sea or shore,

' *Freshet* or purling brook, of shell or fin.'

It seems this Author, by a *freshet*, meant a spreading collection of fresh water, distinguished from a brook.

In a description of New-England, written and published in England, 1658, by Ferdinando Gorges, the word is used precisely in the sense in which it is now understood in New-England.

p. 29. ' Between Salem and Charlestown, is situated the town of Lynn, near to a river, whose strong *freshet* at the end of winter filleth all her

banks, and with a violent torrent vents itself into the sea.'

In a letter written by William Penn, 1683, and printed in his works, he speaks of the *fresbes* of the Delaware, thus 'The Dutch inhabit those parts of the Province that lie on or near the Bay, and the Swedes the *fresbes* of the Delaware.' N. B. All the Swedish settlements were situate *below* the City of Philadelphia.

In Oldmixon's *British Empire in America*, vol. I. p. 151, printed at London in 1708, it is said 'The first town below the falls is Newton, and next to it is Pennsbury over against Burlington. This part of the Delaware is called the *fresbes*.'

N. B. Burlington is twenty miles *above* Philadelphia.

In Beverley's *History of Virginia*, printed at London, 1720, we find the same word, p. 105. 'The damage occasioned by the worms in the rivers of Virginia, may be avoided by running [the ships] up into the *fresbes* during five or six weeks that the worm is above water.'

From these authorities, I conclude that the noun *fresbes* was understood to distinguish those parts of a river, below all the falls, where the fresh water which comes down from above is stopped by the flowing of the sea, and at the ebb, resumes its natural course; and which therefore, rises and falls with the tide. But the word *fresbet* has another signification; it means a river swollen by rain or melted snow, in the interior country, rising above its usual level, spreading over the adjacent lowlands, and rushing with an accelerated current to the sea. In this sense it is understood in New-England, and as it is a part of the language of the age and country in which I write, it is frequently used in this volume. If some of the words which our fathers

brought from Britain, and which were in vogue a century ago, be there lost or forgotten, it is no reason that they should be disused here, especially when they convey a definite sense.

I know not whether as much can be said in vindication of another word, which I have frequently used, and which perhaps is not more known in England, viz. *intervale*. I can cite no very ancient authority for it; but it is well understood in all parts of New-England to distinguish the low-land adjacent to the fresh rivers, which is frequently overflowed by the freshets; and which is accounted some of our most valuable soil, because it is rendered permanently fertile, by the bountiful hand of nature, without the labour of man.

There is another deviation from the strict letter of the English dictionaries; which is found extremely convenient in our discourses on population. From the verb *migro* are derived *emigrate* and IMMIGRATE; with the same propriety as from *mergo* are derived *emerge* and IMMERGE. Accordingly the verb IMMIGRATE and the nouns IMMIGRANT and IMMIGRATION are used without scruple in some parts of this volume.

In the 176th page, the number of inhabitants taken by the census of 1790, is said to be 142,018. This number was given to me in May, 1791, by the late Marshall John Parker, Esq. Afterward it was discovered that a mistake had been made by one of his assistants in returning the town of Burton twice, viz. in the County of Strafford and the County of Grafton. In the former it was set down as containing 133, in the latter 141. The latter is retained; and the former being deducted from 142,018 leaves the sum total 141,885, which is the number returned to Congress and published by authority.

Twenty years have now elapsed since this work was first undertaken ; during which time it has struggled with many embarrassments, and has, more than once, been thrown by, as impracticable ; but the favourable reception it has met with from the public and the continual importunity of its friends, have prevailed on me to complete it ; for which purpose no pains have been spared. The receipt on the sale of the volumes *hitherto* falls short of the actual expense of the impression. How productive it may prove in future is uncertain. As some encouragement to the work, the Legislature of New-Hampshire have granted *fifty pounds*, which I have received and for which they again have my thanks.

In the course of my historical researches I have found some materials for an AMERICAN BIOGRAPHY ; and have entertained thoughts of pursuing my inquiries, with a view to present such a work to the public ; if gentlemen in different parts of the American Continent and Islands, will favour me with suitable communications. The object is to delineate the characters and actions of remarkable persons *deceased*, and the events connected with them. Among those persons will be ranked Statesmen, Literary Persons, Warriors, Inventors, Navigators and Travellers, whether among the European Nations, who have possessions in America and their descendants, or the original Natives. But how voluminous or expensive the work will be, or how long time will be required to complete it, cannot at present be ascertained.

Boston, April 23, 1792.

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CHAP. I.

Situation, Extent, Boundaries, and Divisions.

THE situation of New-Hampshire, on the terraqueous globe, is between $42^{\circ} 41'$ and $45^{\circ} 11'$ of latitude, north from the equator ; and between $70^{\circ} 40'$ and $72^{\circ} 28'$ of longitude, west from the royal observatory of Greenwich. Its length from the northern to the southern extremity is one hundred and sixty-eight miles. Its greatest breadth, measured from the entrance of Pascataqua harbour, to the mouth of West River, which falls into Connecticut river, opposite to the town of Chesterfield, is ninety miles. This line crosses the 43d degree of latitude. From this line northerly, New-Hampshire decreases in breadth. On the 44th degree of latitude it is fifty-five miles ; and on the 45th degree, nineteen miles wide.

It is bounded on the south by the State of Massachusetts ; from which it is divided by a line, beginning on the sea shore, at a point three miles northward of the mouth of the river Merrimack ; pursuing a course similar to the curvature of that river, at the same distance ; and ending at a point, three miles north of Patucket fall, in the town of Dracut. From this point, the line extends, on a supposed due west course, till it crosses Connecticut river, and ends on its western bank ; the distance being fifty-five miles.

This line, called the due west line, was measured and marked in 1741, by Richard Hazzen. He was ordered by Governor Belcher to allow ten degrees for the westerly variation of the needle ; the theory of which, now imperfect, was then less known. It

is supposed that the variation at that time, and in that place, was not more than eight degrees. In 1773, each end of this line was accurately examined by celestial observations, made by Thomas Wright, one of Capt. Holland's company of surveyors; when the western extremity was found to decline from the eastern two minutes and fifty-seven seconds of latitude. This was computed to make a difference of 59,872 acres of land, which would have been gained by New-Hampshire, if the line had been run with precision.

From the point where this line strikes Connecticut river, up to the forty-fifth degree of latitude, the western bank of that river is the western boundary of New-Hampshire, and the eastern boundary of Vermont.

On its eastern side, New-Hampshire is bounded by the Atlantic ocean, from the aforementioned point, three miles northward of the mouth of Merrimack river, along the shore, to the middle of the main entrance of Pascataqua harbour; which distance is computed to be about eighteen miles. Thence the boundary line runs up the middle of the river, to its most northerly head, which is a pond, situated partly in the town of Wakefield and partly in the town of Shapley, in the County of York. The distance of this pond from the mouth of the harbour, is about forty miles, in a N. N. W. course. From the head of this pond, according to the royal determination, in 1740, the dividing line was to run 'north, two degrees west, till one hundred and 'twenty miles were finished, from the mouth of Pascataqua harbour, or until it meet with his Majesty's other governments.' The reason for mentioning this specific distance in the decree, was, that one hundred and twenty miles were the extent of the Province of Maine. At that time, no other gov-

ernment subject to the British Crown, lay in that direction. In 1763, the new Province of Quebec was erected, and its southern boundary was 'a line passing along the high lands, which divide the rivers that empty themselves into the river St. Lawrence, from those which fall into the sea.' By the treaty of peace, between America and Britain, in 1783, all the lands southward of that line, reckoning it from the eastward 'to the northwest head of Connecticut river, and thence down along the middle of that river, to the forty-fifth degree of north latitude' were ceded to the United States. These determinations have been so construed, as to favor an extension of the line between New-Hampshire and Maine, to the high lands which bound the Province of Quebec ; a distance of twenty-five miles beyond the northern limits of the Province of Maine.

The line from the head of Salmon fall river, was begun to be measured and marked, in 1741, by Walter Bryant, who also was ordered to allow ten degrees for the westerly variation. In 1767, a controversy arose between the two Provinces, on a suggestion that Bryant had mistaken the main branch of the river ; but no alteration was made in consequence of this suggestion. In 1768, the Governor of New-Hampshire ordered the line to be surveyed, to its farthest extent. The surveyor, Isaac Rindge, began where Bryant had left it ; and marked the line, on the same course by the compass, to a point sixteen miles northward of Amariscogin river, and not far from the lake Umbagog. This survey being made twenty-seven years after the former, when the westerly variation was less than before, gave the line a westerly inclination. No farther survey was made till 1789, twenty-one years after the second ; during which period, the variation was still decreasing, and the line was continued on the same course

by the compass, which must bring it still more westerly. For these reasons, in my map, the line is inflected, so as to correspond with the last survey as laid down in a plan returned by Joseph Cramm and Jeremiah Eames, and filed in the Secretary's office.

The State is bounded on the north, by the British Province of Quebec. The northeastern extremity of this boundary line, is a birch tree, marked *N. E. New-Hampshire*, 1789. This line extends along the high lands, 17 miles and two hundred and seven rods, to the head of the northwestern branch of Connecticut river; at which extremity is a fir tree, inscribed *N. H. N. W.* 1789. Thence the boundary descends, to the forty-fifth degree of latitude, along the middle of the northwestern branch, which there unites with the northeastern, or main branch of the river.

The superficial area of New-Hampshire, as calculated by George Sproule, in 1773, according to Holland's survey, in which he was employed, was found to be 9296 square miles, or 5,949,440 acres. The addition made by the survey of the northern boundary, in 1789, is said to be 195 square miles, or 124,800 acres. From the whole it is supposed a deduction may be made for water, of at least one hundred thousand acres.

Holland's survey was made in 1773, and 1774, at the expence of the Province. The result of it is contained in a large map, engraven in London, 1784, by the direction and at the expence of Paul Wentworth, Esq. Those parts which were actually surveyed by Holland or his assistants, are laid down with great accuracy. The eastern boundary line and the parts connected with it were not surveyed, but taken from such materials and information as could at that time be collected. In the map annexed to this work, those parts are more full and cor-

rect, excepting the lines of townships and locations, which in so small a draught could not be introduced without confusion. For the same reason, the names of some townships are omitted, chiefly such as have no settlements made in them.

The State is divided into five Counties, viz. Rockingham, Strafford, Hillsborough, Cheshire and Grafton, the boundaries of which are not noticed in Holland's, but are marked on this map by dotted lines.

The straight line of Mason's patent is also described. The history of it is as follows :

It was observed in the course of the preceding work, that the Masonian proprietors claimed a *curve* line as their western boundary ; and that under the royal government no person had controverted that claim. When the war with Great-Britain was terminated by the peace of 1783, the grantees of some crown lands, with which this line interfered, petitioned the Assembly to ascertain the limits of Mason's patent. The Masonians at the same time presented a petition, shewing the pretension which they had to a curve line, and praying that a survey of it, which had been made in 1768, by Robert Fletcher, might be established. About the same time, the heirs of Allen, whose claim had long lain dormant, for want of ability to prosecute it, having consulted Council, and admitted some persons of property into partnership with them, entered and took possession of the unoccupied lands within the limits of the patent ; and in imitation of the Masonians, gave general deeds of quitclaim, to all *bona fide* purchasers, previously to the first of May, 1785 ; which deeds were recorded in each County, and published in the newspapers. They also petitioned the Assembly to establish a head line for their patent.

After a solemn hearing of these claims, the Assembly ordered a survey to be made of sixty miles

from the sea, on the southern and eastern lines of the State, and a *straight* line to be run from the end of one line of sixty miles, to the end of the other. They also passed an act to quiet all *bona fide* purchasers of lands, between the straight and curve lines, so far, as that the State should not disturb them. This survey was made in 1787, by Joseph Blanchard and Charles Clapham. The line begins on the southern boundary, at lot No. 18, in the town of Rindge. Its course is north 39° east. Its extent is 93½ miles. It ends at a point in the eastern boundary, which is seven miles and two hundred and six rods, northward of Great Offapy river. This line being established, as the head line, or western boundary of Mason's patent, the Masonians, for the sum of forty thousand dollars in public securities, and eight hundred dollars in specie, purchased of the State, all its right and title to the unoccupied lands between the straight line and the curve. The heirs of Allen were then confined in their claim, to those waste lands only, which were within the straight line. They have since compromised their dispute, with the proprietors of eleven of the fifteen Masonian shares, by deeds of mutual quitclaim and release. This was done in January, 1790.

C H A P. II.

Air, Climate, and Seasons.

THE air of New-Hampshire is generally pure and salubrious. During the winter months, the prevailing wind is from the northwest ; which is dry, cold and bracing ; it rarely brings snow, but when it does, the degree of cold is increased. That the coldness of our northwest wind is owing to the great lakes, is a vulgar error, often retailed by geographical writers, and adopted by unthinking people. All the great lakes lie westward of the N. W. point, and some of them southward of W. It is more natural to suppose that the immense wilderness, but especially the mountains, when covered with snow, give a keenness to the air, as a cake of ice to a quantity of liquor in which it floats ; and that this air, put in motion, conveys its cold as far as it extends.

The deepest snows fall with a northeast wind, and storms from that quarter are most violent, and of longest duration ; after which the wind commonly changes to the N. W. and blows briskly for a day or two, driving the snow into heaps. This effect is produced only in the open grounds ; in the forest the snow lies level, from two to four feet in depth, throughout the winter. On the mountains, the snow falls earlier, and remains later than in the low grounds. On those elevated summits, the winds also have greater force, driving the snow into the long and deep gullies of the mountains, where it is so consolidated, as not to be easily dissolved, by the vernal sun. Spots of snow are seen on the south

sides of the mountains as late as May, and on the highest till July.

Light frosts begin in September ; in October they are more frequent, and by the end of that month, ice is made in small collections of water ; but the weather is mostly serene. November is a variable month, alternately wet and dry ; the surface of the ground is frequently frozen and thawed. The same weather continues through a part of December, but commonly, in the course of this month, the rivers and the earth are thoroughly frozen, and well prepared to receive and retain the snow. January often produces a thaw, which is succeeded by a severe frost. In February we have the deepest snows, and the coldest weather ; but the lowest depression of the thermometer is generally followed by wet and mild weather. March is blustering and cold, with frequent flights of snow ; but the sun is then so high as to melt the snow at noon. In April the open country is generally cleared of snow ; but it commonly lies in the woods till May. This is the usual routine of the wintry season ; but there are sometimes variations. In 1771, the snow did not fall till the end of January. In 1786, it was very deep in the beginning of December. When the snow comes early, it preserves the ground from being deeply frozen, otherwise the frost penetrates to the depth of three feet or more.

From the middle of September, the mornings and evenings begin to be so chill, that a small fire becomes a desirable companion. In October, the weather requires one to be kept more steadily ; from the time that the autumnal rains come on in November, it is invariably necessary, to the end of March ; in April it is intermitted at noon ; a storm is always expected in May ; and, till that is past, the chimney is not closed. We therefore reckon eight months of cold weather in the year.

Cattle are housed from the beginning of November. In the severest weather, nature teaches the fowls to roost on the backs of cattle, in the barns, to preserve their feet from being frozen. By the beginning of May, the grass is sufficiently grown for cattle to live abroad ; good husbandmen do not permit them to feed till the twenty-first of May ; but scarcity of fodder obliges the poorer sort to depart from this rule,

A dry winter is extremely cold. The winter of 1779 '80, was remarkably dry, without rain or thaw ; the snow was constantly drifted by the wind, the springs of water were very low, and the weather as severe and tedious as ever was experienced. It was called the Canada winter, from its similarity to the usual dry cold of that climate.

A freezing rain is no uncommon spectacle. The trees are sometimes so incruusted with ice that the smaller branches break with its weight. The sun, shining on these incrustations, affords a brilliant entertainment to a curious spectator ; but it is of short duration.

On the seventeenth of February, 1782, an unusual kind of hoar frost was observed. The wind had been northerly on the preceding day, with some appearance of snow. The morning was calm and foggy. The trees and bushes were white with frost, which appeared on the north sides, only, of the twigs and smaller branches ; but on the larger limbs and trunks, there was none : Nor was any seen on the houses or fences, excepting on the sharp edges of boards ; but every point of a stick or nail, and every rope and string, which was exposed to the north, was covered. The spiculæ were of all lengths, from an inch downward, and about the thickness of a knitting pin. They increased in number and size, for about two hours after the rising of the sun ;

and in about an hour after this, began to fall, like snow, on the ground ; they did not all disappear till two hours after noon.

Light frosts have been known in every month of the year, excepting July. In June, 1764, a sudden frost nipped the Indian corn, then newly sprouted ; but it recovered and sprouted again. A frost in August is generally destructive to this vegetable ; the corn being then in the milk. After it has grown beyond this stage, the frost serves to open the husk and dry the ears, to prepare it for harvest.

A southeast storm is often as violent, but commonly shorter, than one from the northeast ; if it begin with snow it soon changes to rain. A brisk wind from the west or south west, with a flight of snow or rain, sometimes happens, but its duration is very short. Squalls of this kind are common in March.

In the spring months there is generally a land breeze in the morning ; a sea breeze begins an hour or two before noon, and continues till about the setting of the sun. The heat of summer is also frequently allayed by breezes from the sea, but they do not reach more than twenty or thirty miles into the country, and the lighter ones not so far. The northeast storms penetrate sixty or seventy miles, but their violence is abated at that distance from the sea.

In July the weather is clear and hot. In August the heat is greatest, and is accompanied with a disagreeable dampness. Thunder is frequent in the summer months ; it is sometimes heard in spring and autumn, but rarely in the winter, though in snow storms the air is often highly electrified, and flashes are sometimes seen. Thunder showers in the summer commonly rise in the western quarter, and pass over to the east ; if they rise in the north or northeast, they produce hail, which sometimes

proves destructive to the fields ; but this mischief it never very extensive. The hail has been known to lie in hollow places, where it has rolled into heaps, till the succeeding day ; but for the most part, it melts soon after falling.

It has often been observed that thunder clouds, when near the earth, seem to be attracted by large collections of water. In the neighbourhood of lakes and ponds, the thunder is reverberated from the surrounding mountains, in a grand and solemn echo of long continuance. One of the most violent thunder storms which was ever known in the maritime parts of New-Hampshire, was on the fourth of May, 1779, at noon. A cloud rose in the N. W. and another in the S. W. at the same time ; they crossed each other, and the former passed very near the earth ; a very black darkness came on, the lightning was an incessant glare, and the thunder a continual peal for about an hour. Many trees, several barns, mills and dwelling-houses were struck ; cattle and sheep were killed in the pastures in several towns ; and a valuable new house, built for religious worship, at Somersworth, was set on fire and consumed. Its steeple had a metallic vane and spindle, but no conductor to the earth. The bell was melted, and fell while in a state of fusion, and no piece of it larger than a musket ball could be found. The effects of this storm were to be traced from Kingston, in a northeasterly direction, to the river Kennebeck.

A southwest breeze in summer is accompanied with a serene sky, and this is the warmest of our winds. Probably the tradition of the natives, that heaven is situated in the S. W. arose from this circumstance. The N. W. wind does not blow in summer, but after a thunder shower, when its elasticity and coolness are as refreshing as the preceding heat is tedious,

Sometimes the extreme heat of several days, produces, in the maritime parts, a sea turn, and in the inland parts, a whirlwind. A remarkable instance of both happened in June, 1782. The heat had been extreme for five days. On the 22d, after the setting of the sun, the wind suddenly shifted from S. W. to N. E. This change sensibly affected the human body, and rendered an additional garment necessary. A very large quantity of Siberian wheat was at that time in a state of luxuriant vegetation. As far as the sea wind extended, which was from twenty to thirty miles, the wheat was chilled and blasted; beyond that distance it was not injured. The next day a whirlwind began near the river Connecticut, the western boundary of New-Hampshire, and directed its course toward the east, in a vein of near half a mile wide. In its progress its fury abated; but the blast extended to the sea, and was accompanied with thunder and rain.

Instances of sudden changes in the weather, are noted in the earliest accounts of the country. In 1658, when the apple trees were in blossom, there came on such a sudden and severe degree of cold, that in a fishing boat belonging to Hampton, one man died before they could reach the shore, another was so chilled that he died in a few days, and a third lost his feet.* This instance is very singular. The common season for the apple trees to blossom, is about the third week in May; but they are earlier or later according to the degree of heat. On the eleventh of May, 1769, when the trees were in bloom, an unusual flight of snow covered them in the afternoon, and continued till the next morning.

In a very warm autumn the earliest apple trees have produced blossoms; and roses have blown in the month of October, but these appearances are very rare.

* MS letter of Rev. Mr. Gookin to Rev. Mr. Prince.

Sudden changes from cold to heat are less frequent than the contrary. The most remarkable instance of this kind happened in the winter of 1759 '60. It was on the Lord's day, in the time of morning service. There had been a freezing rain in the preceding night; and the trees, houses, and earth were covered with ice. On a sudden, the wind changed to the south; the ice fell from the trees, with a crackling noise, and a vapour rose from the houses as if they had been on fire. On coming into the open air, the change of the weather from severe cold, to summer heat, was astonishing. The greatest degree of heat which has been observed by Fahrenheit's thermometer is $\frac{96}{0}$ and of cold $\frac{0}{9}$. These observations were made at Portsmouth.

Notwithstanding these anomalous instances of inequality and sudden transition, the sky is commonly settled and serene for many days together, and the changes of weather are gradual. In the winter, a dry season, if there be snow on the ground, is favourable for the purpose of transportation in sleighs and sledges. In summer, if there be no extensive rain, for three or four weeks, the want of it is severely felt. The years 1761 and 1762 were remarkable for early drought, which caused a scarcity of corn and hay; the rain which fell in August, brought forward the latter feed in the pastures and fields. The year 1782 was remarkable for a late drought; the latter feed and the autumnal vegetables, were destroyed. In October, the grass was so dry as to crackle under the feet. The long continuance of drought is observed to produce a coolness in the air. These droughts do not affect the mountainous parts of the country, so much as the plains; which are also more injured by early frosts than the higher lands.

In the spring, the trees which have been felled the

preceding year, are burned in the new plantations. If the season be dry, the flames spread in the woods, and a large extent of the forest is sometimes on fire at once. Fences and buildings are often destroyed by these raging conflagrations. The only effectual way to prevent the spreading of such a fire, is to kindle another at a distance, and to drive the flame along through the bushes, or dry grafs, to meet the greater fire, that all the fuel may be consumed. This operation requires a large number of people, and no small degree of dexterity and resolution. In swamps, a fire has been known to penetrate several feet under the ground, and consume the roots of trees. When a fire has raged to this degree, nothing can extinguish it but a heavy rain.

From these numerous fires arise immense clouds of smoke, mingled with the burnt leaves of the trees, which are carried to great distances by the wind. These clouds meeting with other vapours in the atmosphere, sometimes produce very singular appearances. The unusual darkness of the nineteenth of May, 1780, was caused by such a combination of vapours.

Fires had spread very extensively in the woods, and the westerly wind had driven the smoke over all the country. It was so thick near the horizon, for several preceding days, that the sun disappeared half an hour before its setting; and in the low grounds, it was almost suffocating. The morning of the nineteenth was cloudy, with some rain; and a black cloud appeared in the southwest, from which thunder was heard. The rain water, and the surface of rivers, was covered with a sooty scum. The remains of a snow drift, which had been raked clean the preceding day, became black. Several small birds flew into the houses, and others were found dead abroad, being suffocated. About an hour be-

fore noon, the clouds assumed a brassy appearance ; after which their colour became a dusky grey ; at one hour after noon it was necessary to light candles.

At the time of the greatest obscuration, the smoke of a chimney was observed to rise perpendicularly, and then incline to the west. A thick fog, which came in from the sea, moved along the hill tops in the same direction. The place where these observations were made, was at Dover, fifteen miles distant from the sea. A light gleam was seen in the north. The extent of this darkness, was more than two hundred miles, from north to south. To the westward, it reached beyond Albany, and it was observed, by a vessel at sea, fifteen leagues eastward of Cape-Anne.

The darkness varied its appearance, in some places, through the afternoon ; but in the maritime parts of New-Hampshire, there was no cessation or interruption of it ; and the evening presented a complete specimen of as total darkness as can be conceived. Before midnight, the vapors dispersed, and the next morning there was no appearance of them ; but for several days after, clouds of smoke were seen in motion, and the burnt leaves of trees were waisted abroad by the wind.

In the neighborhood of fresh rivers and ponds a whitish fog in the morning, lying over the water, is a sure indication of fair weather for that day ; and when no fog is seen, rain is expected before night. In the mountainous parts of the country, the ascent of vapors, and their formation into clouds, is a curious and entertaining object. The vapors are seen rising in small columns, like smoke from many chimneys. When risen to a certain height, they spread, meet, condense, and are attracted by the mountains, where they either distil in gentle dews, and replen-

ish the springs, or descend in showers, accompanied with thunder. After short intermissions, the process is repeated many times, in the course of a summer day, affording to travellers a lively illustration of what is observed in the book of Job, 'they are wet with the showers of the mountains.'*

The *aurora borealis* was first noticed in New-Hampshire, in the year 1719.† The elder people say it is much more frequent now than formerly. It sometimes appears in the form of a luminous arch, extending from east to west; but more commonly rises from a dark convexity in the north, and flashes upward, toward the zenith. In a calm night, and in the intervals between gentle flaws of wind, an attentive ear, in a retired situation, may perceive it to be accompanied with a sound.‡ This luminous appearance has been observed in all seasons of the year, in the extremes of heat and cold, and in all the intermediate degrees. The colour of the streams is sometimes variegated, white, blue, yellow and red, the lustre of which, reflected from the snow, is an appearance highly picturesque and entertaining.

* Job xxiv. 8.

† The following account of this appearance is taken from the Boston News-Letter, of March 14, 1720.

"The late extraordinary appearance in the heavens, of December 11, is the first of the kind that is known to have been seen in New-England, and was at the same time observed throughout the country. Some say it was seen at three several times, viz, at eight, twelve, and again toward morning. The account of some, is, of a cloud lying lengthway, toward the northwest and northeast; from the ends of which arose two clouds, ascending toward the middle of the heavens, of a deep red colour, and almost meeting each other, then descending toward the place whence they arose. The air was light in the time of it, as a little after sun set, or before sun rise; and some saw lights, something like shooting stars, streaming upwards from the clouds. It was seen in our towns all along; and the great variety of accounts, may in part proceed from this, that some saw only one, others another of its appearances."

‡ If any person would have a precise idea of the sound, caused by the flashing of the *aurora borealis*, let him hold a silk handkerchief by the corner, in one hand, and with the thumb and finger of the other hand, make a quick stroke along its edge.

Mr. Hearne in his journey to the northern ocean says, that he has frequently heard the northern lights "make a rustling and crackling noise, like the waving of a large flag in a fresh gale of wind."—Page 224, 4to edition.

C H A P. III.

Face of the Country.—Sea coast.—Mountains.

THE whole extent of the sea coast, from the southern boundary, to the mouth of Pascataqua harbour, is about eighteen miles. The shore is mostly a sandy beach, within which are salt marshes, intersected by creeks. There are several coves for fishing vessels ; but the only harbour for ships, is the entrance of Pascataqua, where the shore is rocky. Some ledges and points of rocks, are situate to the southward of the harbour, off Rye ; but there is no remarkable head land on the coast. Two bluffs only appear, elevated above the level of the beach, which are called the great and little Boar's heads ; these are in the town of Hampton.

The remarkable mountain, Agamenticus, lies about four leagues north of the entrance of Pascataqua, and there are three inferior summits, known by the name of Frost's hills, at a less distance, on the N. W. These are situate within the County of York, formerly called the Province of Maine ; but from the sea, no remarkable high lands appear, which are within the limits of New-Hampshire, nearer than twenty or thirty miles. The first ridge is continued through the towns of Rochester, Barrington and Nottingham, and the several summits are distinguished by different names, as Teneriffe, Saddleback, Tuckaway, &c. but the general name is the Blue Hills. Beyond these, are several higher ones, as Mount major, Moose mountain, &c. these are not in a continued range, but detached ; between them are many smaller elevations, some of which are, and others are not distinctly named. Farther back the mountains rise

higher, and among the third range, Chocorua, Ossipy and Kyarfarge, claim the preeminence. Beyond these, is the lofty ridge, which is commonly called the height of land, because it separates the branches of the river Connecticut, from those of Merrimack. In this ridge is the Grand Monadnock, twenty-two miles east of the river Connecticut, and ten miles north of the southern boundary line. Thirty miles north of this, lies Sunnapee mountain, and forty eight miles farther, in the same direction, is Mooshe-lock. The ridge then is continued, northeasterly, dividing the waters of the river Connecticut from those of Saco and Amariscoggin. Here the mountains rise much higher, and the most elevated summits in this range, are the White mountains.

Mountains appear of different colours, according to the nature of their exterior surface, the season of the year, and the distance of the observer. They are all covered with wood, the smaller ones wholly, the larger have bald summits, which appear white, as long as the snow remains ; but at other times, vary their colour according to the distance of the observer. If he is very nigh, they appear of the grey colour of the rock, and the farther he recedes, their appearance is a paler blue, till it becomes nearly of the colour of the sky. The woody parts of mountains when viewed at a small distance, are green; at a greater distance, blue. From some favorable situations, all these varieties may be seen at once ; mountains of different shades, textures and elevations, are presented to the eye of the curious observer.

The wood on these mountains, is of various kinds but they have all more or less of the ever-greens, as pine, spruce, hemlock and fir, intermixed with shrubs and vines. It is universally observed that trees of every kind diminish in their size to-

ward the fummit ; many of them, though fhort, appear to be very aged. On fome mountains we find a shrubbery of hemlock and fpruce, whose branches are knit together fo as to be impenetrable. The fnow lodges on their tops, and a cavity is formed underneath. Thefe are called by the Indians, Hak-mantaks.

On the tops of feveral of the highest mountains, are fmall collections of water, and on others marfhly fspots, which are frequented by aquatic birds. The roads over these mountains which are paffable, are frequently wet and miry, while the valleys below are dry. About two or three feet under the furface of the mountain, is a firm earth, called the pan, which is impenetrable by water ; the rains and dews are therefore retained in the fofter foil, or formed into fprings and brooks. This foil is made by the rotting of fallen leaves and wood, the growth of paff ages.

We frequently obferve large rocks detached from the mountains, fome of them fo diftant from the bafe, that they could not have rolled thither but in fome convulfion of the earth. Smaller mafles are frequently diflodged by the thawing of the ground in the fpring, after it has been heaved up by the froft. In the year 1746, a party who were ranging the woods, in the neighbourhood of the White mountains, on a warm day, in the month of March, were alarmed with a repeated noife, which they fupposed to be the firing of guns. On further fearch, they found it to be caufed by rocks, falling from the fouth fide of a fteep mountain.*

Mountainous countries are obferved to be moft fubject to earthquakes ; and the nearer any lands are to mountains, it may be expected that thefe

* Letter of Walter Bryant, Esq. who was one of the party.

commotions will be more frequent. New-England has never been visited with destructive earthquakes ; but more shocks have been observed in its northern than in its southern parts. After the great shocks in 1727 and 1755, which were perceived through a great part of the continent, smaller shocks were more frequent in New-Hampshire than at Boston. From 1755 to 1774, scarcely a year passed without some repetition ; from that time to 1783, none were observed ; and there have been but two or three since.

Several phenomena respecting the larger mountains, afford matter of amusement ; and some are of real use. People who live near them, humourously style the mountains their almanack, because, by the ascent and attraction of vapors, they can form a judgment of the weather. If a cloud is attracted by a mountain, and hovers on its top, they predict rain ; and if after rain, the mountain continues capped, they expect a repetition of showers. A storm is preceded for several hours, by a roaring of the mountain, which may be heard ten or twelve miles. This is frequently observed by people who live near the grand Monadnock. It is also said, that when there is a perfect calm on the south side, there is sometimes a furious wind on the north, which drives the snow, so that it is seen whirling far above the trees.*

The town of Moultonborough lies under the S. W. side of the great Ossipy mountain ; and it is there observed, that in a N. E. storm, ‘the wind falls over the mountain, like water over a dam ; and with such a force as frequently to unroof the houses.’†

The altitude of this mountain, has not been ascertained ; but that of the grand Monadnock was measured in 1780, by James Winthrop, Esq. by

*Ainsworth's MS, letter.

† Shaw's MS, letter.

means of a barometer, and the table of corresponding heights, in Martin's *Philosophia Britannica**. At the base, on the north side, the barometer being at 28,4, gave an elevation of 1895 feet. At the upper edge of the wood, it was 27,0, which denoted 2682 feet; and at the highest point of the rock, 26,4, which announced an elevation of 3254 feet above the level of the sea.

The base of this mountain is about five miles in diameter, from north to south; and about three, from east to west. Its summit is a bald rock; on some parts of it are large piles of broken rocks; and on the sides are some appearances of the explosion of subterraneous fires.

A similar phenomenon has been observed on a mountain, in the township of Chesterfield, adjoining Connecticut river, called West river mountain. About the year 1730, the garrison of Fort Dummer, distant four miles, was alarmed with frequent explosions, and with columns of fire and smoke, emitted from the mountain. The like appearances have been observed at various times since; particularly, one in 1752, was the most violent of any. There are two places, where the rocks bear marks of having been heated and calcined. A company of persons having conceived a notion of precious metals being contained in this mountain, have penetrated it in various directions; and have found further evidences of internal fires; particularly a large quantity of *scoria*, in some parts loose, in others adhering to the rocks. The only valuable effect of their industry, is the discovery of a fine, soft, yellow earth, which when burned, is changed into a brown pigment; and another of the colour of the peach blossom. There is also observed on the earth, which has been thrown out, a white incrustation, which has the taste of nitre. The top of the mountain is

an area, of about twenty rods square, which is hollow ; and in a wet season, is filled with water, as is common on the tops of mountains ; but there is no appearance of such a crater as is peculiar to volcanos. Under the mountain, are many fragments of rock, which have fallen from it ; but whether by explosions, or any other convulsions, or by force of the frost, cannot be ascertained. An account of these appearances was sent to the Academy of arts and sciences, by the late Daniel Jones, Esq. of Hinsdale.* Since which, it is said, that the noise has been again heard ; but in a late visit to the mountain, by the Rev. Mr. Gay, no sign of any recent explosion, could be discovered ; nor can any thing be added to what Mr. Jones has written on the subject.†

* Memoirs Vol. 1. page 313.

† Gay's MS, letter Oct. 29, 1790.

C H A P. IV.

Particular Description of the White Mountains.

FROM the earliest settlement of the country, the White mountains have attracted the attention of all sorts of persons. They are undoubtedly the highest land in New-England, and in clear weather, are discovered before any other land, by vessels coming in to the eastern coast; but by reason of their white appearance, are frequently mistaken for clouds. They are visible on the land at the distance of eighty miles, on the south and southeast sides; they appear higher when viewed from the northeast, and it is said, they are seen from the neighbourhood of Chamble and Quebec. The Indians gave them the name of Agiocochook: They had a very ancient tradition that their country was once drowned, with all its inhabitants, except one Powaw and his wife, who, foreseeing the flood, fled to these mountains, where they were preserved, and that from them the country was re-peopled.* They had a superstitious veneration for the summit, as the habitation of invisible beings; they never ventured to ascend it, and always endeavoured to dissuade every one from the attempt. From them, and the captives, whom they sometimes led to Canada, through the passes of these mountains, many fictions have been propagated, which have given rise to marvellous and incredible stories; particularly, it has been reported, that at immense and inaccessible heights, there have been seen carbuncles, which are supposed to appear luminous in the night. Some writers, who have at-

* Josselyn's voyage to New-England, p. 185.

tempted to give an account of these mountains, have ascribed the whiteness of them, to shining rocks, or a kind of white moss; and the highest summit has been deemed inaccessible, on account of the extreme cold, which threatens to freeze the traveller, in the midst of summer.

Nature has, indeed, in that region, formed her works on a large scale, and presented to view, many objects which do not ordinarily occur. A person who is unacquainted with a mountainous country, cannot, upon his first coming into it, make an adequate judgment of heights and distances; he will imagine every thing to be nearer and less than it really is, until, by experience, he learns to correct his apprehensions, and accommodate his eye to the magnitude and situation of the objects around him. When amazement is excited by the grandeur and sublimity of the scenes presented to view, it is necessary to curb the imagination, and exercise judgment with mathematical precision; or the temptation to romance will be invincible.

The White mountains are the most elevated part of a ridge, which extends N. E. and S. W. to an immense distance. The area of their base, is an irregular figure, the whole circuit of which, is not less than sixty miles. The number of summits within this area, cannot at present be ascertained, the country round them being a thick wilderness. The greatest number which can be seen at once, is at Dartmouth, on the N. W. side, where seven summits appear at one view, of which four are bald. Of these, the three highest are the most distant, being on the eastern side of the cluster; one of these is the mountain which makes so majestic an appearance all along the shore of the eastern counties of Massachusetts: It has lately been distinguished by the name of *Mount WASHINGTON*.

To arrive at the foot of this mountain, there is a continual ascent of twelve miles, from the plain of Pigwacket, which brings the traveller to the height of land, between Saco and Amariscoggin rivers. At this height there is a level of about a mile square, part of which is a meadow, formerly a beaver pond, with a dam at each end. Here, though elevated more than three thousand feet above the level of the sea, the traveller finds himself in a deep valley. On the east is a steep mountain, out of which issue several springs, one of which is the fountain of Ellis river, a branch of Saco, which runs south; another of Peabody river, a branch of Amariscoggin, which runs north. From this meadow, toward the west, there is an uninterrupted ascent, on a ridge, between two deep gullies, to the summit of Mount Washington.

The lower part of the mountain is shaded by a thick growth of spruce and fir. The surface is composed of rocks, covered with very long green moss, which extends from one rock to another, and is, in many places, so thick and strong, as to bear a man's weight. This immense bed of moss, serves as a sponge, to retain the moisture brought by the clouds and vapours, which are frequently rising and gathering round the mountains; the thick growth of wood, prevents the rays of the sun from penetrating to exhale it; so that there is a constant supply of water deposited in the crevices of the rocks, and issuing in the form of springs, from every part of the mountain.

The rocks which compose the surface of the mountain, are, in some parts, slate, in others, flint; some specimens of rock chrystal have been found, but of no great value. No lime stone has yet been discovered, though the most likely rocks have been tried with aquafortis. There is one precipice, on the

eastern side, not only completely perpendicular, but composed of square stones, as regular as a piece of masonry; it is about five feet high, and from fifteen to twenty in length. The uppermost rocks of the mountain, are the common quartz, of a dark grey colour; when broken, they shew very small shining specks, but there is no such appearance on the exterior part. The eastern side of the mountain, rises in an angle of 45 degrees, and requires six or seven hours of hard labour to ascend it. Many of the precipices are so steep, as to oblige the traveller to use his hands, as well as feet, and to hold by the trees, which diminish in size, till they degenerate to shrubs and bushes; above these, are low vines, some bearing red, and others blue berries, and the uppermost vegetation is a species of grass, called winter-grass, mixed with the moss of the rocks.*

Having surmounted the upper and steepest precipice, there is a large area, called the plain. It is a dry heath, composed of rocks covered with moss,

* "At the base of the summit of Mount Washington, the limits of vegetation may with propriety be fixed. There are indeed, on some of the rocks, even to their apices scattered specks of a mossy appearance; but I conceive them to be extraneous substances, accidentally adhering to the rocks, for I could not discover, with my botanical microscope, any part of that plant regularly formed. The limits of vegetation at the base of this summit, are as well defined as that between the woods and the bald or mossy part. So striking is the appearance, that at a considerable distance, the mind is impressed with an idea, that vegetation extends no farther than a line, as well defined as the penumbra and shadow, in a lunar eclipse. The stones I have by me, from the summit, have not the smallest appearance of moss upon them.

"There is evidently the appearance of three zones—1, the woods—2, the bald mossy part—3, the part above vegetation. The same appearance has been observed on the Alps, and all other high mountains.

"I recollect no grass on the plain. The spaces between the rocks in the second zone, and on the plain, are filled with spruce and fir, which, perhaps, have been growing ever since the creation, and yet many of them have not attained a greater height than three or four inches, but their spreading tops are so thick and strong, as to support the weight of a man, without yielding in the smallest degree. The snows and winds keeping the surface even with the general surface of the rocks. In many places, on the sides, we could get glades of this growth, some rods in extent, when we could, by sitting down on our feet, slide the whole length. The tops of the growth of wood were so thick and firm, as to bear us currently, a considerable distance, before we arrived at the utmost boundaries, which were almost as well defined as the water on the shore of a pond. The tops of the wood, had the appearance of having been shorn off, exhibiting a smooth surface, from their upper limits, to a great distance down the mountain."

MS. of Dr. Cutler.

and bearing the appearance of a pasture, in the beginning of the winter season. In some openings, between the rocks, there are springs of water, in others dry gravel. Here the grouse or heath bird resorts, and is generally out of danger; several of them were shot by some travellers in October, 1774. The extent of this plain is uncertain; from the eastern side, to the foot of the pinnacle, or sugar-loaf, it is nearly level, and it may be walked over in less than an hour. The sugar loaf, is a pyramidal heap of grey rocks, which, in some places, are formed like winding steps. This pinnacle has been ascended in one hour and a half. The traveller having gained the summit, is recompensed for his toil, if the sky be serene, with a most noble and extensive prospect. On the S. E. side, there is a view of the Atlantic ocean, the nearest part of which, is sixty-five miles, in a direct line. On the W. and N. the prospect is bounded by the high lands, which separate the waters of Connecticut and Amariscoggin rivers, from those of Lake Champlain and St. Lawrence. On the south, it extends to the southernmost mountains of New-Hampshire, comprehending a view of the Lake Winipiseogee. On every side of these mountains, are long winding gullies, beginning at the precipice below the plain; and deepening in the descent. In winter, the snow lodges in these gullies; and being driven, by the N. W. and N. E. wind, from the top, is deepest in those which are situated on the southerly side. It is observed to lie longer in the spring on the south, than on the N. W. side, which is the case with many other hills in New-Hampshire.

A ranging company, who ascended the highest mountain, on the N. W. part, April 29th, 1725, found the snow four feet deep on that side; the summit was almost bare of snow, though covered with

white frost and ice, and a small pond of water, near the top, was hard frozen.

In 1774, some men, who were making a road through the eastern pass of the mountain, ascended the mountain to the summit, on the 6th of June, and on the south side, in one of the deep gullies, found a body of snow thirteen feet deep, and so hard, as to bear them. On the 19th of the same month, some of the same party ascended again, and in the same spot, the snow was five feet deep. In the first week of September, 1783, two men, who attempted to ascend the mountain, found the bald top so covered with snow and ice, then newly formed, that they could not reach the summit; but this does not happen every year so soon; for the mountain has been ascended as late as the first week in October, when no snow was upon it; and though the mountains begin to be covered, at times, with snow, as early as September, yet it goes off again, and seldom gets fixed till the end of October, or the beginning of November; but from that time it remains till July.* In the year 1784, snow was seen on the south side of the largest mountain, till the 12th of July; in 1790, it lay till the month of August.

* The following is a journal of the appearances of the mountain, in the autumnal months of 1784, observed by the Rev. Mr. Haven, of Rochester, whose house is in plain view of the south side of the mountain, distant about sixty miles.

Sept. 17 and 18 a N. E. storm of rain.

20. Mountain appeared white.

22. Of a pale blue.

Oct. 3 and 4. Rain, succeeded by frost.

5, Mountain white.

8, Of a pale blue.

9, White at the west end.

10, White in the morning, most part blue P. M.

22 and 24, Blue.

28, White at the west end, the rest blue.

Nov. 2, A spot of white at the west end.

4, Uniformly white.

5, Very white.

From this time, to the 23d, when the weather was clear enough to see so far, the lower part of the mountain appeared very white; the summit involved in squally clouds.

N. B. the west end is the highest part.

During this period, of nine or ten months, the mountains exhibit more or less of that bright appearance, from which they are denominated white. In the spring, when the snow is partly dissolved, they appear of a pale blue, streaked with white; and after it is wholly gone, at the distance of sixty miles, they are altogether of the same pale blue, nearly approaching a sky colour; while at the same time, viewed at the distance of eight miles or less, they appear of the proper colour of the rock. These changes are observed by the people who live within constant view of them; and from these facts and observations, it may with certainty be concluded, that the whiteness of them is wholly caused by the snow, and not by any other white substance, for in fact, there is none. There are indeed in the summer months, some streaks, which appear brighter than other parts; but these, when viewed attentively with a telescope, are plainly discerned to be the edges or the sides of the long deep gullies, enlightened by the sun, and the dark parts are the shaded sides of the same; in the course of a day, these spots may be seen to vary, according to the position of the sun.

A company of gentlemen visited these mountains in July, 1784, with a view to make particular observations on the several phenomena which might occur. It happened, unfortunately, that thick clouds covered the mountains almost the whole time, so that some of the instruments, which, with much labour, they had carried up, were rendered useless. These were a sextant, a telescope, an instrument for ascertaining the bearings of distant objects, a barometer, a thermometer and several others for different purposes. In the barometer, the mercury ranged at 22,6, and the thermometer stood at 44 degrees. It was their intention to have placed one

of each at the foot of the mountain, at the same time that the others were carried to the top, for the purpose of making corresponding observations; but they were unhappily broken in the course of the journey, through the rugged roads and thick woods; and the barometer, which was carried to the summit, had suffered so much agitation, that an allowance was necessary to be made, in calculating the height of the mountain, which was computed in round numbers, at five thousand and five hundred feet above the meadow, in the valley below, and nearly ten thousand feet above the level of the sea.* They intended to have made a geometrical mensuration of the altitude; but in the meadow, they could not obtain a base of sufficient length, nor see the summit of the sugar loaf; and in another place, where these inconveniences were removed, they were prevented by the almost continual obscuration of the mountains, by clouds.

Their exercise, in ascending the mountain, was so violent, that when Doctor Cutler, who carried the thermometer, took it out of his bosom, the mercury stood at fever heat, but it soon fell to 44° , and by the time that he had adjusted his barometer and thermometer, the cold had nearly deprived him of the use of his fingers. On the uppermost rock, the Rev. Mr. Little began to engrave the letters N. H. but was so chilled with the cold, that he gave the instruments to Col. Whipple, who finished the letters. Under a stone, they left a plate of lead, on which their names were engraven. The sun shone clear while they were passing over the plain, but immediately after their arrival at the highest sum-

* This computation was made by the Rev. Dr. Cutler. Subsequent observations and calculations have induced the author to believe the computation of his ingenious friend too moderate, and he is persuaded, that whenever the mountain can be measured with the requisite precision, it will be found to exceed ten thousand feet, of perpendicular altitude, above the level of the ocean.

mit, they had the mortification to be enveloped in a dense cloud, which came up the opposite side of the mountain. This unfortunate circumstance, prevented their making any farther use of their instruments. Being thus involved, as they were descending from the plain, in one of the long, deep gullies, not being able to see to the bottom, on a sudden, their pilot slipped, and was gone out of sight, though happily, without any other damage, than tearing his clothes. This accident obliged them to stop. When they turned their eyes upward, they were astonished at the immense depth and steepness of the place, which they had descended by fixing their heels on the prominent parts of the rock, and found it impracticable to reascend the same way ; but having discovered a winding gully, of a more gradual ascent, in this they got up to the plain, and then came down on the eastern side ; this deep gully, was on the S. E. From these circumstances, it may be inferred, that it is more practicable and safe, to ascend or descend on the ridges, than in the gullies of the mountain.

These vast and irregular heights, being copiously replenished with water, exhibit a great variety of beautiful cascades ; some of which fall in a perpendicular sheet or spout, others are winding and sloping, others spread, and form a basin in the rock, and then gush in a cataract over its edge. A poetic fancy may find full gratification amidst these wild and rugged scenes, if its ardor be not checked by the fatigue of the approach. Almost every thing in nature, which can be supposed capable of inspiring ideas of the sublime and beautiful, is here realized. Aged mountains, stupendous elevations, rolling clouds, impending rocks, verdant woods, chrystal streams, the gentle rill, and the roaring torrent, all conspire to amaze, to soothe and to enrapture.

On the western part of these mountains is a pass, commonly called the notch, which, in the narrowest part, measures but twenty-two feet, between two perpendicular rocks. From the height above it, a brook descends, and meanders through a meadow, formerly a beaver pond. It is surrounded by rocks, which, on one side, are perpendicular, and on the others, rise in an angle of forty-five degrees—a strikingly picturesque scene! This defile was known to the Indians, who formerly led their captives through it to Canada; but it had been forgotten or neglected, till the year 1771, when two hunters passed through it, and from their report, the proprietors of lands, on the northern parts of Connecticut river, formed the plan of a road through it, to the upper Cohos, from which it is distant twenty-five miles. Along the eastern side of the meadow, under the perpendicular rock, is a causeway, of large logs, sunk into the mud by rocks, blown with gunpowder, from the mountain. On this foundation, is constructed a road, which passes through the narrow defile, at the south end of the meadow, leaving a passage for the rivulet, which glides along the western side. This rivulet, is the head of the river Saco; and on the north side of the meadow, at a little distance, is another brook, which is the head of Ammonoosuck, a large branch of Connecticut river. The latitude of this place, is $44^{\circ} 12'$, N.

The rivulet, which gives rise to Saco, descends towards the south; and at a little distance from the defile, its waters are augmented by two streams from the left, one of which descends in a trench of two feet wide, and is called the flume, from the near resemblance which it bears to an artificial flume. Over these are thrown strong bridges; and the whole construction of this road, is firm and durable; much labour has been expended upon it, and the net pro-

ceeds of a confiscated estate, were applied, to defray the expense. In the descent, the pass widens, and the stream increases ; but for eight or ten miles from the notch, the mountains on each side are so near, as to leave room only for the river and its intervalles ; which are not more than half a mile wide. In the course of this descent, several curious objects present themselves to view. On the side of one mountain, is a projection, resembling a shelf, on which stand four large square rocks, in a form resembling as many huge folio volumes. In two or three places, at immense heights, and perfectly inaccessible, appear rocks, of a white and red hue, the surface of which is polished, like a mirror, by the constant trickling of water over them. These being exposed to the west and south, are capable, in the night, of reflecting the moon and star beams to the wondering traveller in the deep, dark valley below, and by the help of imagination, are sufficient to give rise to the fiction of carbuncles.

To encompass these mountains as the roads are laid out, through the eastern and western passes, and round the northern side of the whole cluster, it is necessary to travel more than seventy miles, and to ford eight considerable rivers, beside many smaller streams. The distance between the heads of rivers, which pursue such different courses, from this immense elevation, and which fall into the sea, so many hundred miles asunder, is so small, that a traveller may, in the course of one day, drink the waters of Saco, Amariscoggin and Connecticut rivers. These waters are all perfectly limpid and sweet, excepting one brook, on the eastern side of Mount Washington, which has a saponaceous taste, and is covered with a very thick and strong froth. It is said, that there is a part of the mountain where the magnetic needle refuses to traverse ; this is proba-

bly caused by a body of iron ore. It is also said, that a mineral, supposed to be lead, has been discovered, near the eastern pass; but that the spot cannot now be found. What stores the bowels of the mountains contain, time must unfold; all searches for subterraneous treasures, having hitherto proved fruitless. The most certain riches which they yield, are the freshets, which bring down the soil, to the intervalles below, and form a fine mould, producing, by the aid of cultivation, corn and herbage, in the most luxuriant plenty.

C H A P. V.

Rivers and other Waters.

NATURE has formed such a connection between mountains and rivers, that in describing one, we are unavoidably led to speak of the other.

New-Hampshire is so situated, that five of the largest rivers in New-England, either take their rise within its limits, or receive much of their water from its mountains. These are the Connecticut, Amariscoggin, Saco, Merrimack and Pascataqua.

Connecticut river rises in a ridge of mountains, which extend northeasterly, to the gulph of St. Lawrence. It has been surveyed, about twenty-five miles beyond the forty-fifth degree of latitude, to the spring head of its northwestern branch. This river extends, on the western border of New-Hampshire, about one hundred and seventy miles. Its general course, for the first thirty miles, is south; for the next thirty, southwest; for the next fifty, south-southwest; and for the remainder of its course, it inclines more to the south; but there are numerous serpentine curves, of almost every direction, in the extent of these general lines. Besides many streams of less note, it receives, on its eastern side, seven very considerable rivers; upper Amonoosuck, Israel and John's rivers, lower Amonoosuck, Sugar river, Cold river and Ashuelot, all which originate within the limits of New-Hampshire, on the western part of the height of land.

Amariscoggin river, rises near the end of the dividing line, between New-Hampshire and the old Province of Maine. The lake Umbagog, and sever-

al smaller ponds, flow into it. From that lake, the river runs in a southern direction, nearly parallel to Connecticut river, and distant from it, about twenty-five miles; but it is deeper, wider, and more rapid. In crossing the country, from Canada, travellers have passed Connecticut river, thinking it only a brook, and then striking on Amariscoggin, have mistaken it for Connecticut, and followed its course. The mistake, however, may be discovered, by observing, that after these rivers have run parallel about twenty miles, the inclination of Amariscoggin, is to the east, and of Connecticut, to the west. After Amariscoggin begins to take an easterly direction, it soon crosses the line, into the Province of Maine, and having watered a great extent of country, in which many new townships are now settling, it forms a junction with Kenebeck, and flows into the sea at Sagadahock.

The head of Saco river, is in the White mountains, at the western pass, commonly called the notch; near which, also, rises the lower Amonooksuck, which runs westerly, into Connecticut river. Saco takes a southerly direction, down the mountain. A large branch of it, called Ellis river, rises at the eastern pass of the mountains, where also originates Peabody river, a branch of Amariscoggin. The fountain heads of these two rivers are so near, that a man may set his foot in one, and reach, with his hand, to the other. In less than half a mile, southward from this fountain, a large stream, which runs down the highest of the White mountains, falls into Ellis river, and in about the same distance from this, another falls from the same mountain; the former of those streams is Cutler's river, the latter New river. The New river first made its appearance during a long rain, in October, 1775. It bore down many rocks and trees, forming a scene of ru-

in for a long course. It has ever since been a constant stream, and where it falls into Ellis river, presents to view a noble cascade, of about one hundred feet, above which, it is divided into three streams, which issue out of the bowels of the mountain. Several other branches of Saco river, fall from different parts of this immense cluster of mountains, and unite about twelve or fifteen miles from their source, at the plain of Pigwacket. These streams have a steep descent, and a rapid current, and the river Saco is observed to rise and overflow very suddenly, in a time of rain, and to subside as suddenly, after the rain has ceased. It passes, in a very serpentine course, through the township of Conway, then crosses the line, into Brownfield and Friburg, and its course from thence to the sea, is about forty-five miles, southeast. It receives, on its western side, two rivers, called the great and little Ossapy; the former of which, comes from a large pond, under a high mountain, both of which bear the same name; the latter flows out of a smaller pond, on the division line, and falls into Saco river, about nine miles below the mouth of the other. In some maps, the lesser Ossapy is laid down as a branch of the greater, but they are two distinct branches of Saco river.

Merrimack river is formed by the confluence of Pemigewasset and Winipiseogee rivers; the former flows from the eastern part of the ridge called the height of land. To one branch of it, Moosehelock mountain gives rise; another comes from the S. W. extremity of the White mountains, and a third from the township of Franconia. The general course of this river, from its source, is south, about fifty miles. Receives, on its western side, Baker's river, which comes from the height of land, a stream from New Chester pond, and another called Smith's river, besides many smaller ones. On its eastern side, it re-

ceives a stream from Squam ponds, with several large and small brooks. In its long descent from the mountains, there are many falls, and its banks, in some places, are very steep and rugged. Wini-piseogee river, comes from the lake of that name, and unites its waters with Pemigewasset, at the lower end of Sanborntown. From this junction, the confluent stream bears the name of Merrimack, to the sea. It receives, on its western side, before it crosses the boundary line, Blackwater, Contoocook, Piscataquoag, Souhegan, and Nashua rivers. On its eastern side, it receives Bowcook, Suncook, Cohas, Beaver, Spicket and Powow rivers. It runs about ninety miles, first in a southerly, then in an easterly direction, and falls into the sea at Newbury-Port.

In its course through New-Hampshire, it passes over several falls, the most beautiful of which, is called the isle of Hookset, but the grandest is Amuskeag. Hookset is about eight miles below the town of Concord; the descent of the water is not more than fifteen feet perpendicular, in thirty rods; a high rock divides the stream, and a smaller rock lies between that and the western shore. From an eminence, on the western side, there is a delightful landscape; the water above and below the fall, the verdant banks, the cultivated fields, and the distant hills, in the back ground, form a picturesque scene, which relieves the eye of the traveller from the dull uniformity of a road through the woods.

Eight miles below Hookset, lies Amuskeag fall; it consists of three large pitches, one below the other, and the water is supposed to fall about eighty feet, in the course of half a mile. The river here is so crooked, that the whole of the fall cannot be viewed at once; though the second pitch, which may be seen from the road, on the western side, appears

truly majestic. In the middle of the upper part of the fall, is a high, rocky island, on some parts of which, are several holes, of various depths, made by the circular motion of small stones, impelled by the force of the descending water.*

At Walpole, is a remarkable fall, in Connecticut river,† formerly known by the name of the great fall. The breadth of the river, above the fall, is twenty-two rods. A large rock divides the stream into two channels, each about ninety feet wide, on the top of the shelving bank. When the water is low, the eastern channel appears crossed, by a bar of solid rock, and the whole stream falls into the western channel, where it is contracted to the breadth of sixteen feet, and flows with astonishing rapidity; but the depth of the water is not known, nor has the perpendicular height of the fall been ascertained. There are several pitches, one above another, in the length of half a mile, the largest of which, is that where the rock divides the stream. Notwithstanding the velocity of the current, the salmon pass up this fall, and are taken many miles above; but the shad proceed no farther.

In the rocks of this fall, are many cavities, like those at Amuskeag, some of which are eighteen inches wide, and from two to four feet deep. On the steep sides of the island rock, hang several arm chairs, fastened to ladders, and secured by a counterpoise, in which fishermen sit to catch salmon and shad with dipping nets.

* The following account of these cavities, was formerly sent to the royal society, and printed in their philosophical transactions, vol. xxix. page 70.

† A little above one of the falls of this river, at a place called Amuskeag, is a huge rock, in the midst of the stream, on the top of which, are a great number of pits, made exactly round, like barrels or hogsheds of different capacities, some of which are capable of holding several tuns. The natives know nothing of the making of them; but the neighbouring Indians used to hide their provisions here, in the wars with the Maquas, affirming that God had cut them out for that purpose; but they seem plainly to be artificial."

† This fall has been described in the most *extravagant* terms, in an anonymous publication, entitled 'the History of Connecticut;' and the description has been frequently reprinted in the news papers, and other periodical works.

Over this fall, in the year 1785, a strong bridge of timber was constructed by Col. Enoch Hale. Its length is three hundred and sixty-five feet, and it is supported in the middle by the great rock. The expense of it was eight hundred pounds, and by a law of the State, a toll is collected from passengers. This is the only bridge across Connecticut river ; but it is in contemplation to erect one, thirty-six miles above, at the middle bar of White river fall, where the passage for the water, between the rocks, is about one hundred feet wide. This place, is in the township of Lebanon, two miles below Dartmouth college.

It would be endless to describe, particularly the numerous falls, which, in the mountainous parts of the country, exhibit a great variety of curious appearances, many of which have been represented in the language of fiction and romance. But there is one in Salmon-fall river, which, not for its magnitude, but for its singularity, deserves notice. It is called the flume, and is situate between the townships of Rochester and Lebanon. The river is here confined between two rocks, about twenty-five feet high ; the breadth, at the top of the bank, is not more than three rods. I once visited this place, in a time of severe drought (September, 1782,) when the flat rocks, which form the bed of the river, were mostly dry. The flume is about four rods in length, and its breadth is various, not more in any part than two feet and a half, and in one part, scarcely an hand breadth ; but here the water had a subterraneous passage.

In the flat rock, are divers cavities, like those abovementioned ; some of them are cylindrical, and others globular ; all of them contained a quantity of small stones and gravel, and in one of them

was a large turtle and several frogs. The dimensions of five of these holes, were as follows :

Diameters in feet and inches.	Depth in feet and inches. (filled with stones.)
7—	3—
3—	4—
1—3	3—
1—	1—4
—4	

The largest of these cavities, is considerably higher than where the water now flows, unless in a great freshet.

From a series of observations, made by James Winthrop, Esq. on the rivers of New-Hampshire and Vermont, he deduces this conclusion, 'that the descent of our rivers, is much less than European theorists have supposed to be necessary to give a current to water. In the last hundred and fifty miles of Connecticut river, it descends not more than two feet in a mile. Onion river, for forty-three miles from its mouth, falls four feet in a mile, and is exceedingly rapid between the cataracts. We may reckon the shore at Quebec, to be at the level of the sea, and two hundred miles from that part of lake Champlain, where the current begins. The difference of elevation, will be three hundred and forty-two feet, or twenty inches to a mile. If we extend our comparison from Quebec, to the top of the Green mountains; at Williamston, the elevation will be one thousand six hundred and sixty-six feet, and the distance, about three hundred and twenty miles ; which is five feet two inches and a half to a mile.*

It is a work of great curiosity, but attended with much fatigue, to trace rivers up to their sources, and observe the uniting of springs and rivulets, to form

* MS. letter of James Winthrop, Esq.

those streams which are dignified by majestic names, and have been revered as Deities by savage and superstitious people. Rivers originate in mountains, and find their way through the crevices of rocks, to the plains below, where they glide through natural meadows, often overflowing them with their freshets, bringing down, from the upper grounds, a fat flume, and depositing it on the lower, which renews and fertilizes the soil, and renders these intervale lands extremely valuable, as no other manure is needed on them for the purposes of agriculture.

It has been asserted, that* ‘rivers run in a more direct channel, as they immediately leave their sources ; that their sinuosities and turnings become more numerous as they proceed ; that it is a certain sign among the natives of America, that they are near the sea, when they find the rivers winding and changing their direction, and that this is even now become an indication to the Europeans themselves in their journies through these trackless forests.’ It is amusing to observe how the European writers, in their accounts of America, entertain themselves and their readers, with a detail of circumstances, which have no foundation but in their own fancies. Such a remark would never have occurred to any person who had traced the rivers of New-England to their sources. The fact is, that rivers run wherever they find a passage, whether it be crooked or strait ; and there are as many windings and sinuosities, at the distance of an hundred miles from the sea, as at any lesser distance. No judgment can be formed of the nearness of the ocean from this circumstance.

There is an important remark concerning these rivers, which would not readily occur to any, but those who have been in the way of actual observa-

* Goldsmith's history of the Earth, Vol. I. page 203.

tion ; and that is, that rivers change their courses, and leave their ancient channels dry. Many places may be seen in our wilderness, where rivers have rolled for ages, and where the stones are worn smooth as on the sea shore, which are now at a considerable distance from the present beds of the rivers. In some places, these ancient channels are converted into ponds, which, from their curved form, are called horse-shoe ponds ; in others, they are overgrown with bushes and trees. These appearances are frequent in the mountainous part of the country. Connecticut river, which divides two States, has, in some places, changed its course. Many acres have been thus made in a few years, and the land is of an excellent quality.

There are generally two strata of intervale lands, on the borders of the large rivers, one is overflowed every year, the other, which is several feet higher, and further removed from the water, is overflowed only in very high freshets. In some places a third is found, but this is rare. The banks of the upper and lower intervalles, are often parallel to each other, and when viewed from the opposite side, appear like the terraces of an artificial garden.

These intervalle lands are of various breadth, according to the near or remote situation of the hills. On Connecticut river, they are from a quarter of a mile to a mile and a half, on each side. In digging into them, large found trunks of trees are found at various depths.

The freshets are not equally high every year. Masts have lain in the river above Amuskeag fall, two or three years, waiting for a sufficiency of water to float them over. They sometimes fall athwart the stream, and are broken ; sometimes in a narrow passage, they are lodged so firmly across, as to be removed only by cutting ; and sometimes

they are so galled by the rocks, in their passage, as to lessen their diameter, and consequently their value.

Every spring there is more or less of a freshet, caused by the dissolving of the snow in the woods and mountains ; if it be gradual, as it always is, when not accelerated by a heavy rain, no damage is done by the rising of the water. Destructive floods have happened at other seasons of the year, as frequently as in the spring. In January, 1770, a remarkable inundation carried away the mills and bridges on several branches of the river Pascataqua. A heavy rain, which continued twelve hours, and which could not penetrate the frozen earth, raised the rivers so high as to break up the ice, then from fourteen to eighteen inches thick, and as hard as marble ; large cakes of it being carried down by the impetuous current, bore all before them. After this the rivers froze again, and the ice continued as usual, till the month of April. When the ice remains late in the spring, it does not break up with violence ; but dissolves gradually, till it disappears. In this manner the frozen lakes and ponds are reduced to fluidity.

In the great flood of October, 1775, when a new river broke out of the White mountains, the banks of Saco river were overflowed very suddenly. Stacks of hay were carried off, cattle were drowned or otherwise killed, and the Indian corn, then ripe for harvest, was destroyed. The river was of a deep brown colour for fourteen days, and when it subsided, great alterations were observed, the bed of the river in some parts was widened, and the course of several of its branches changed ; large ridges of pebbles were thrown up in the middle, forming two channels where there had been but one before.

Another flood happened in October, 1785, which

destroyed the fields, and carried off cattle and swine on that river; and in other places swept away bridges, mills, and great quantities of lumber. Some mills, on Salmon-fall river, were preserved by chains, one end of which was fastened to their principal timbers, and the other end to trees or posts set in the ground. In Cochecho river, below the great fall, the water rose fourteen feet above high water mark. Immense quantities of drift wood are brought down by these freshets, from which the inhabitants of the lower towns, contiguous to the rivers, are supplied with fuel, and they have learned to be extremely dextrous in towing on shore whole trees with their branches. But notwithstanding their activity, much escapes them, and is driven out to sea, and some of it is thrown back on the coast.

Saco river has risen twenty-five feet, in a great freshet; its common rise is ten feet. Pemigewasset river has also been known to rise twenty-five feet. Connecticut river, in a common freshet, is ten feet higher than its usual summer level. Its greatest elevation does not exceed twenty feet.

Winipiseogee lake is the largest collection of water in New-Hampshire. It is twenty-two miles in length, from S. E. to N. W. and of very unequal breadth, but no where more than eight miles. Some very long necks of land project into it, and it contains several islands, large and small. The mountains which surround it, give rise to many streams which flow into it; and between it and the mountains, and several lesser ponds, which communicate with it. Contiguous to this lake, are the townships of Moultonborough, on the N. W. Tiltonborough and Wolfborough on the N. E. Meredith and Gilmantown on the S. W. and a tract of land, called the Gore, on the S. E. From the S. E. ex-

tremity of this lake, called Merry-meeting bay, to the N. W. part called Senter-harbour, there is good navigation in the summer, and generally a good road in the winter ; the lake is frozen about three months, and many sleighs and teams, from the circumjacent towns, cross it on the ice.

The next largest lake, is Umbagog, in the northern extremity of the state. It is but little known, and no other survey has been made of it than was necessary for extending the divisional line between New-Hampshire and Maine, in 1789. Next to this, are Squam, in the township of Holderness ; Sunnapee, in the townships of Wendel and Fishersfield, and great Ossage, in the ungranted land of the Masonian purchase. Smaller ponds are very numerous, scarcely any town being without one or more. There is generally a current through them ; but some have no visible outlet. Their waters are limpid and sweet.

A remarkable circumstance is mentioned, respecting Mascomy pond, which lies partly in Lebanon and partly in Enfield, and vents into Connecticut river. It is about five miles in length, and one in breadth ; its depth is from thirty to forty fathoms. The surrounding land bears evident marks that the surface of this pond was once thirty or forty feet higher than its present level. By what cause the alteration was made, and at what time, is unknown ; but appearances indicate a sudden rupture, there being no sign of any margin between its former and present height. About a mile distant from its outlet, there is a declivity of rocks, forty feet higher than the stream, as it now runs. By the situation of these rocks, it appears that they were once a fall, over which the water flowed ; but it has now made for itself a very deep channel, through solid earth,

nearly a mile in length, where it seems confined for futurity.*

In the township of Atkinson, 'in a large meadow, 'there is an island, containing seven or eight acres, 'which was formerly loaded with valuable pine 'timber, and other forest wood. When the meadow is overflowed, by means of an artificial dam, 'this island rises in the same degree as the water 'rises, which is sometimes six feet. Near the middle of this island, is a small pond, which has been 'gradually lessening ever since it was known, and 'is now almost covered with verdure. In this place, 'a pole of fifty feet has disappeared, without finding 'a bottom. In the water of that pond, there have 'been fish in plenty ; which when the meadow hath 'been flowed, have appeared there, and when the 'water hath been drawn off, have been left on the 'meadow ; at which time the island settles to its 'usual state.'†

In the town of Rye, there was formerly a fresh pond, covering about one hundred and fifty acres, situate within ten or fifteen rods of the sea, being separated from it by a bank of sand. A communication was opened between this pond and the sea, in the year 1719, by which means the fresh water was drawn off, and the place is regularly overflowed by the tide, and yields large crops of salt hay.‡

Within this present year (1791) a canal has been cut through the marshes, which opens an inland navigation, from Hampton, through Salisbury, into Merrimack river, for about eight miles. By this passage, loaded boats may be conducted with the utmost ease and safety.

* MS. Letters of the Hon. Elisha Payne, Esq.

† MS. letter of the Rev. Stephen Peadody.

‡ MS. letter of Rev. Mr. Porter.

C H A P. VI.

Remarks on the Forest, Manner of Surveying, making Roads and Travelling.

NOTWITHSTANDING the gloomy appearance of an American forest, yet a contemplative mind may find in it many subjects of entertainment. The most obvious remark, is the silence which reigns through it. In a calm day, no sound is heard but that of running water, or perhaps the chirping of a squirrel, or the squalling of a jay. Singing birds do not frequent the thick woods; but in every opening, made by the hand of cultivation, their melody is delightful.

Another thing, worthy of observation, is the aged and majestic appearance of the trees, of which the most noble is the mast pine. This tree often grows to the height of one hundred and fifty, and sometimes two hundred feet. It is straight as an arrow, and has no branches but very near the top. It is from twenty to forty inches in diameter at its base, and appears like a stately pillar, adorned with a verdant capital, in form of a cone. Interspersed among these, are the common forest trees, of various kinds, whose height is generally about sixty or eighty feet. In swamps, and near rivers, there is a thick growth of underwood, which renders travelling difficult. On high lands, it is not so troublesome; and on dry plains, it is quite inconsiderable.

Amidst these wild and rugged scenes, it is amusing to observe the luxuriant sportings of nature. Trees are seen growing on a naked rock; their roots either penetrate some of its crevices, or run over its surface, and shoot into the ground. When a tree is contigu-

ous to a small rock, its bark will frequently inclose and cover it. Branches of different trees, but of the same species, sometimes intertwine, and even ingraft themselves, so as to grow together in one. On some trees, are found large protuberant warts, capable of being formed into bowls, which are very tough and durable. On rocks, as well as on trees, we find varieties of moss ; it sometimes assumes a grotesque appearance, hanging in tufts, like long hair, from the branches ; or inclosing the trunks ; or spreading over rocks, like a carpet, and extending from one rock to another. It is observed that moss is thickest on the north sides of trees. By this mark the savages know their course in cloudy weather, and many of our hunters have learned of them, to travel without a compass.

In laying out roads, and lines of townships, it is usual for the surveyor to make large measure, of which however, there is no certain standard. Some allow one in thirty, for the swagging of the chain. The length of a man's arm to every half chain, has been allowed for inequality of surface. The half chain is most convenient in thick woods ; but some have very absurdly used a line ; and if any allowance is made for its contraction by moisture, it must be arbitrary. Surveyors are often sworn to go according to their best skill and judgment ; this they may do with great sincerity, and yet, for want of better skill, may commit egregious mistakes. The variation of the needle, has not in general been attended to with that caution which it demands, and from this negligence, many errors have arisen. It was once proposed, in the General Assembly, that durable monuments should be erected in convenient places, on a true meridian ; by which all surveyors should be obliged to regulate their compasses ; few of them, at that time, being skilled in the method of finding

the variation by the sun's amplitude ; but the proposal was rejected.

The manner of making a new road, through the wilderness, is this : First, a surveyor and his party, with the compass and chain, explore the country, and where they find the land suitable for a road, the trees are spotted, by cutting out a piece of the bark, and at the end of every mile, the number is marked on the nearest tree. Then follow the axe-men, who clear away the bushes and fell the trees, in a space of three rods wide, cutting them as near as possible to the ground, that the stumps may not impede travelling ; and if the trees are very long, they cut them again, into such lengths, as that the teamsters, by the help of chains and oxen, may draw them out of the way. In wet land, the trees thus felled, or others which are proper, are formed into causeways and bridges. Rocks are either turned out of the road, or split by gunpowder or heated by fire and then softened by water.

Roads are not brought to perfection at once, especially in rocky and hilly land ; but after the first operations, they are passable for single horses and teams of oxen. As the earth is opened to the sun, many wet places are dried, and brooks are contracted ; and as the land is more and more cleared, smaller streams disappear. The best kind of land for roads is where the pitch pine grows ; this is generally level, or if not perfectly so, yet always dry. The soil is sandy or gravelly ; the trees are sparse ; and the under growth consists of brakes, fern and wortle bushes, which are easily subdued ; but this kind of land is not profitable. The best land for cultivation, is a deep loamy soil, which makes miry roads, and needs much labor to be bestowed on bridges and causeways. For crossing small streams, the beaver dams are found very safe and conveni-

ent. They are about three or four feet wide at the top, which is on a level with the water above, and is always firm and solid. New roads, therefore, are frequently laid out so as to save expence, by taking advantage of the labor of that useful animal.

When a road is constantly used, the feet of horses and cattle keep down the growth of bushes, which sprout, with great luxuriance, from the roots of felled trees ; but if the road be neglected, these young shoots render travelling extremely inconvenient ; and it is more difficult to clear them a second time. Men who are used to handle the axe, had rather attack a sturdy tree than hack the bushes. High winds frequently blow up large trees by the roots, or break them off above the ground. These wind-fallen trees often prove a great obstruction to new roads ; a single horse may find his way over or round them ; but if a team is to pass, the obstruction must be removed by the axe, for which reason, the drivers of teams are never unprovided with this necessary instrument.

The expence of making and keeping roads in repair, is generally borne by the proprietors and inhabitants of the towns through which they pass ; though, in some instances, new roads have been explored and laid out, at the public expence. In each incorporated town, the law requires that surveyors of highways be annually chosen, whose business it is, to prevent or remove obstructions ; to keep roads and bridges in repair ; and to call upon the inhabitants for their respective quotas of labor or expence. These officers are invested with sufficient power to answer the beneficial end of their appointment ; and in case of failure, they, or the towns are liable to be presented by the grand inquest of the county. It was formerly the custom, for those who were at work on the highways, to invite passengers to drink,

and expect a gratuity in return ; but this beggarly practice is almost entirely abolished.

Horses are the only beasts used for riding ; though, in the mountainous parts of the country, mules might be more serviceable, if the breeding of them were introduced. In travelling the roads along Connecticut river, which are, in many places, both steep and clayey, it is usual, at all seasons, if the weather be wet, to have the shoes of horses turned with sharp points. This is universally practised in winter, when the earth is covered with ice and snow. Oxen are also then shod in the same manner. When a deep snow has obstructed the roads, they are in some places opened by an instrument called a snow plough. It is made of planks, in a triangular form, with two side boards to turn the snow out on either hand. This instrument is drawn by a large number of oxen, and loaded with as many people as can stand on it, whose weight makes a hard and level path. When such an instrument is not at hand, a sled turned upside down answers the purpose, though not so effectually. These operations are conducted by the surveyors of highways who direct the snow path to be made either in the common road, or through fields and other inclosures, as necessity requires.

In travelling through New-Hampshire, there are now few places so remote from public houses, or hospitable inhabitants, as to oblige the traveller to lodge in the woods ; but when this happens, either by necessity or choice, a temporary hut may be constructed, in an hour, by a person furnished with an axe. For this purpose a dry situation is chosen, as near as may be to running water. The bark of hemlock or spruce is peeled, in pieces of three or four feet long, and flatted ; two or three upright crotchets are set in the ground, on which a pole is

fixed horizontally ; from the pole are laid other sticks, in a sloping position, to the ground ; on these are laid the flatted pieces of bark, each lapped over the other, in the form of shingles : Under this shed, other pieces of bark are laid on the ground, for a floor, on which are strewed small twigs for a carpet. Before the open side of the hut, is made a large fire, toward which the traveller places his feet, and being wrapped in a blanket, he passes the night very comfortably, though, if the wind be unfavorable, he may be somewhat incommoded by smoke. He is in no danger from wild beasts, who never venture to approach a fire. People who are used to the woods, do not always give themselves the trouble to build a hut ; but lie wrapped in their blanket by a fire ; or, in foul weather, spread their blanket on sticks, and lie under it.

Within these last twenty years, the country has been much improved in respect to roads ; and the communication between the distant parts of it is become, in a great measure, easy and commodious. Much, however, remains to be done, especially in the western and northern parts of the State. Connecticut river is so nearly parallel to the eastern coast of New-England, as to preserve almost the same distance from the sea, which is generally from eighty to one hundred miles. The towns situate on that river communicate with the maritime towns, by different roads. Those in the southwestern quarter of the State generally carry their produce to Boston. Roads have been opened from Dartmouth College, and the lower Cohos, to Portsmouth ; and the establishment of a communication, by water carriage, across Winipiseogee lake, has been contemplated.

The towns above the lower Cohos, have as yet no convenient roads, directly to the sea coast. The

immense mountains between the rivers Saco and Connecticut, are, in most places, inaccessible; and where a communication is opened, transportation is necessarily very difficult. The people on the upper branches of Saco river, find their nearest market at Portland, in Casco bay; and thither the inhabitants of the towns of the upper Cohos have resorted. But from a survey made in 1782, by Dummer Sewall, Esq. it was found, that a road from Northumberland, on Connecticut river, to the head of navigation in Kennebec river, is very practicable. The distance is between eighty and ninety miles; and for a third part of that distance from Kennebec, there are already roads and settlements.

The line which divides the northern part of New-Hampshire, from the eastern counties of Massachusetts, York and Cumberland, is an absurd and unnatural boundary. The establishment of it originated in a narrow, selfish policy; but as the true interest of the country is now better understood, and more liberal sentiments prevail, it appears to many attentive observers, that the whole extent of territory, between the upper part of Connecticut river on the west, and the Atlantic ocean as far as Kennebec on the east, and as far northward as the limits of the United States, is formed by nature, to have a connexion and dependence, which may be rendered mutually beneficial to the maritime and inland parts. How far the benefit may be promoted, by an union of jurisdiction, deserves to be considered.

C H A P. VII.

Monuments and relicts of the Indians.

IN describing any country, it is natural to make some inquiry concerning the vestiges of its ancient inhabitants. It is well known that the original natives of this part of America, were not ambitious of perpetuating their fame by durable monuments. Their invention was chiefly employed either in providing for their subsistence, by hunting, fishing and planting, or in guarding against and surprising their enemies. Their houses and canoes were constructed of light and perishable materials. Their mode of travelling was to take all possible advantage of water carriage, and to shorten distances, by transporting their birchen canoes across the necks of land which were convenient for the purpose. Their manner of taking fish was either by entangling them in weirs, or dipping for them in scoopnets, or striking them with spears. They took quadrupeds in traps or pit-falls, or shot them, as well as birds, with arrows. For the construction of their canoes and houses they used hatchets, chisels, and gouges of stone. To cook their meat, they either broiled it on coals, or on a wooden grate, or roasted it on a forked stick, or boiled it in kettles of stone. Their corn was pounded in mortars of wood, with pestles of stone. Their bread was either baked on flat stones set before a fire, or in green leaves laid under hot ashes. Clam-shells served them for spoons, and their fingers for knives and forks. They had no sharper instruments than could be formed of stones, shells and bones. Of these the two last are perishable by age; but of the first,

relics are frequently found in the places of their former residence, generally in the neighbourhood of water falls, and other convenient fishing places. The manner of finding them is by plowing or digging. The most of those which have been discovered, have come to light by accident, and a few only are so perfect as to merit preservation.

The hatchet is a hard stone, eight or ten inches in length and three or four in breadth, of an oval form, flatted and rubbed to an edge at one end; near the other end is a groove in which the handle was fastened; and their process to do it was this: When the stone was prepared, they chose a very young sapling, and, splitting it near the ground, they forced the hatchet into it, as far as the groove, and left nature to complete the work by the growth of the wood, so as to fill the groove and adhere firmly to the stone. They then cut off the sapling above and below, and the hatchet was fit for use.

The chissel is about six inches long and two inches wide, flatted and rubbed sharp at one end. It was used only by the hand, for it would not bear to be driven. The gouge differs from the chissel only in being hollow at the edge. With these instruments they felled trees, cut them into proper lengths, scooped them out hollow for canoes, trays, or mortars, and fashioned them to any shape which they pleased. To save labor, they made use of fire, to soften those parts of the wood which were to be cut with these imperfect tools; and by a proper application of wet earth or clay, they could circumscribe the operation of the fire at their pleasure.*

* 'I have seen a native (says Roger Williams) go into the woods with his hatchet, carrying only a basket of corne, and stones to strike fire. When he hath felled his tree (either a chesnut or pine) he maketh him a little hut or shed of the bark of it. He puts fire, and follows the burning of it in the midst, in many places. His corne he boils, and bath the brooke by him, and sometimes angles for a little fish. So he continueth burning and hewing, until he hath, in ten or twelve days, finished, and getting lands, launched his boat.'

Their pestles are long, cylindrical or conical stones, of the heaviest kind ; some of which have figures, rudely wrought, at the end of the handle.

Their kettle is nothing more than a hole, either natural or artificial, in a large stone ; but their mode of boiling in it would not readily occur to a person who had seen a kettle used no other way than with a fire under it. Their fire was made by the side of the kettle, and a number of small stones were heated. The kettle being filled with water, and the food placed in it, the hot stones were put in, one after another, and by a dextrous repetition of this process, the meat or fish was boiled.

Of arrow-heads, there is found a greater number than of any other instrument ; and they are of all sizes from one to five inches in length ; pointed and jagged, with a notch on each side, at the lower end, to bind them to the shaft, the end of which was split to let in the head. Children were early taught the use of the bow, and many of the arrow-heads which are found seem to have been fit only for their use.

Another implement of stone is found, the use of which is to us undetermined. It is shaped like a pear, with a neck, and was probably suspended by a string. Some suppose it was hung to a net, and that many of them placed at the lower edge served the purpose of weights to sink it.

Some specimens of sculpture have been found, but they are not common. In the museum of the Academy of Arts and Sciences, there is an imitation of the head of a serpent, at the end of a long stone pestle, found at Wells, in the county of York. There is, in the possession of a gentleman in New-Hampshire, a piece of bone, on which is engraven the bust of a man, apparently in the agonies of death. The countenance is savage, and the work is well execut-

ed. This bone with the figure on it, was found at the shore of the little bay, in the river Pascataqua.

In the places of their habitations are sometimes found circular hearths of flat stones, which were laid in the middle of their wigwams. Their mode of lodging was with their feet to the fire. This custom is adopted by people who lie abroad in the woods, and by others at home. It is accounted both a preventative and a remedy for a cold.

The cellars in which they preserved their corn, are sometimes discovered in the new settlements, and their graves are frequently seen. Most of the skeletons appear to be in a sitting posture, and some remains of the instruments which were supposed necessary to their subsistence, ornament or defence in the "country of souls," are found with them; particularly the stone pipe for smoking tobacco, of which there are several varieties. In a piece of intervale land near the Ossapy pond, is a *tumulus* or mound of earth, overgrown with pine, in which, at the depth of two feet, several skeletons have been discovered, buried with the face downward.* At Exeter, about two years ago, the remains of an infant skeleton were dug up. It was in a perpendicular position, and had been inclosed with a hollow log. Some strings of wampum were found near it, and several spoons, apparently of European manufacture.

The remains of their fields are still visible in many places; these were not extensive, and the hills which they made about their corn stalks were small. Some pieces of baked earthen ware have been found at Sanborn-town and Goff's-town, from which it is supposed that the Indians had learned the potter's art; but of what antiquity these remnants are, and whether manufactured by them or not, is uncertain.

* MS. letter of Wentworth Cheswell, Esq.

The paths which served them for carrying places between rivers, or different parts of the same river, are frequently discovered, in the cutting of roads, or laying out of new townships. Probably some hints might be taken from this circumstance, to expedite and facilitate our inland navigation.

In their capital fishing places, particularly in great Ossagey and Winipiseogee rivers, are the remains of their wears, constructed with very large stones. At Sanborntown there is the appearance of a fortress consisting of five distinct walls, one within the other, and at Hinsdale there is something of the same kind; but these are vastly inferior, both in design and execution to the military works found in the country of the Senekas and in the neighbourhood of the Ohio.

I have heard of two specimens of an Indian *Gazette*, found in New-Hampshire. One was a pine tree, on the shore of Winipiseogee river, on which was depicted a canoe, with two men in it. This is supposed to have been a mark of direction to those who might come after.* The other was a tree in Moultonborough, standing by a carrying place, between two ponds. On this tree was carved the history of one of their expeditions. The number of the killed and prisoners, was represented by so many human figures; the former were marked with the stroke of a knife, across their throats, and even the distinction between the males and females, was preserved.†

Some of their modes and customs have been learned by our own people, and are still retained. In the river Pascataqua, lobsters and flat fish are struck with a spear; and the best time for this kind of fishing is the night. A lighted pitch-knot is placed on the outside of a canoe, which not only attracts the fish, but gives the fishermen direction

* Woodman's MS. letter.

† Shaw's MS. letter.

where to strike. The river is sometimes illuminated by a multitude of these floating lights. The Indian scoop-net is shaped like a pocket; the edge of which is fastened to a wooden bow, at the end of a long pole. With these are caught salmon, shad, alewives, smelts and lampreys. Frost-fish are taken with wooden tongs, and black eels in cylindrical baskets, with a hole, resembling mouse traps made of wire.

The *culheag* or log-trap, is used for taking wolves, bears and martins. Its size varies, according to the bulk or strength of the animal. It is a forceps, composed of two long sticks, one lying on the other, connected at one end, and open at the other. Near the open end is made a semicircular, covered enclosure, with short stakes, driven into the ground on one side of the logs, which are firmly secured by another stake, on the opposite side. In this enclosure is placed the bait, fastened to a round stick, which lies across the lower log, the upper log resting on the end of a perpendicular pointed stick, the other end of which is set on the round stick. The animal having scented the bait, finds no way to come at it, but by putting his head between the logs. As soon as he touches the bait, the round stick, on which it is fastened, rolls; the perpendicular gives way; the upper log falls, and crushes him to death in an instant, without injuring his skin.

To take martins, the hunters make a great number of these traps, at the distance of about a quarter or half a mile from each other; they scent the whole space between the traps, by drawing a piece of raw flesh on the ground; this scent guides the animal to the trap, which is baited with the same. The hunters visit the traps once in a day, and retire to their camp with the prey. There are two seasons for this species of hunting, namely, in December and March.

Beavers are taken in iron spring traps. The Indians have learned to use these traps, in preference to their own.

The use of snow-shoes was learned at first from them. The shape and construction of them are well known. The stick which projects behind acts as a spring, and sets the man forward at every step ; by which means, one who is used to this mode of travelling, can walk on the snow, more expeditiously than on the ground.

We are indebted to them, for the method of preserving the flesh of animals in snow. This is very useful to people who raise or buy large quantities of poultry for the market. They fill the hollow parts, and pack them in a cask with snow ; which, whilst it remains undissolved, preserves the flesh in its original sweetness. The Indians had another way of preserving flesh, by cutting it from the bone, and drying it in smoke ; but this is now seldom used, unless the meat has been previously cured with salt, the use of which, was unknown to the savages.

Their mode of catching ducks, is still used in those places where this species of game abounds. In the month of August, the old ducks shed their feathers, and the young, being unfledged, are not able to fly. During this period they swim on the water, and may be driven into small creeks, whence they cannot escape. They are then easily caught in great numbers, and preserved for winter by salt or smoke.

We have also learned from the natives, to dress leather with the brains and fat of the animal, which render it extremely soft and pliable*. They have

* A lather is made of the brains and the soft fat or marrow in which the skin is soaked ; it is then dried in smoke ; afterward washed and soaked in warm water, till the grain is open then wrung out, dried by a slow fire, rubbed and stretched as long as any moisture remains in it. It is then scraped with a circular knife, and becomes very soft and delicate.

an art of dying hair in various colors, which are bright and permanent. I know not whether they have communicated this knowledge.

Some of their modes of cookery have been adopted, and are retained. Their roasted and boiled ears of green corn, their *samp* and *homony*, which consist of corn bruised and soaked or boiled, their *nokchike*, which is corn parched and pounded, their *suckatash*, which is a mixture of corn and beans boiled, are much used, and very palatable. One of the most delicate of their dishes was the *upaquontop*, or the head of a bass boiled, and the broth thickened with homony. The lip of a moose, and the tail of a beaver, prepared in this manner, were among their greatest luxuries. They prepared a very agreeable liquor by infusing the meal of parched corn in warm water and sweetening it with the sugar of maple.

Their cultivation was extremely imperfect. The only objects of it were corn, beans, pumpkins and squashes, which were planted by their women, with the aid of no instruments but stones and clam-shells; and no manure but fish. Yet, their judgment of the proper season for planting, cannot be amended. It was when the leaves of the white oak are as big as the ear of a mouse. Their method of girdling trees to kill them, that the land might be opened for planting, is used by some people in their first essays of husbandry. It is not only a lazy fashion and quite inexcusable where axes may be had, but the ground needs clearing as often as the trees or branches are broken off by the wind.

The virtues of many herbs, roots and barks, with which the country abounds, were well known to the natives, and some traditionary knowledge of this kind has been preserved, though much is lost for want of a more certain mode of preservation.

than human memory. Some of their medicinal operations are still practised ; but most of them are disused, being superseded by professional improvements. They raised a blister by burning *punk* or touchwood on the skin. They applied roots, boiled soft, in the form of a poultice to the throat or other parts, when swelled or inflamed. They relieved a person chilled with cold, by pouring warm water down the throat. They attempted the cure of fevers by sweating in a covered hut, with the steam of water poured on hot stones, and then plunging into cold water. For pains in the limbs they had another mode of sweating. A number of fods were heated, and the patient, wrapped in a mat, was laid on some and covered with others, till the heat of the turf was supposed to have extracted the pain. The offices of physician and priest were united in the same person, and a variety of mysterious rites accompanied his operations.

They had a knowledge of poisons and antidotes, and could so prepare themselves, that the most venomous serpents would avoid them, or prove harmless in their hands. This knowledge has seldom been communicated, and is always treated as mysterious.

I wish it could not be said, that some of their superstitious notions have been transferred and propagated. The idea that lonely mountains and rocks are inhabited by departed spirits, and other invisible and imaginary beings, is not yet worn out. Certain charms and spells, which are supposed to be effectual preservatives, or cures in cases of witchcraft, are still in use among the vulgar ; though perhaps some of these traditions may owe their origin to the superstition of our European ancestors, descended from the remoter savages of Britain, Ireland and Germany. These notions, however pitied

by some, and ridiculed by others, are still deeply engraven on the minds of many, and are maintained with an inflexibility which would do them honor if the cause were worthy of defence. So strong are these impressions, that the same persons, whose intrepidity in scenes of real danger is unquestionable, often render themselves miserable by the apprehension of evils, which exist only in their imagination.

C H A P. VIII.

Forest-trees, and other vegetable productions.

FEW persons in this country, have studied natural history as a science, and of those who have a taste for inquiries of this kind, none have had leisure to pursue them, to the extent which is desirable. In the description of an American State, it would be unpardonable not to take notice of its natural productions. With much diffidence I enter on this part of my work, sensible that my knowledge of the subject is imperfect, yet, desirous of contributing something, to promote a branch of science, now in its infancy ; but for which there is an ample field of inquiry.*

Elm (*ulmus americana.*) Of this tree there is but one species, of which there are two varieties, the white and the red. The inner rind of both is stringy and tough, and is frequently used for the bottoms of chairs, and for bed-cords. The wood is not easily split and therefore serves for the naves of wheels. The bark of the white elm is used medicinally for the gravel. The European elm (*ulmus campestris*) is so far naturalized as to propagate itself in copes.

Sassafras (*laurus sassafras*) is commonly found in moist land. It does not, in this State, grow to a large size. Its root, bark and leaves have an aromatic smell. It affords a valuable ingredient for beer as well as for medicinal purposes. The wood makes handsome bedsteads, and it is said that bugs

* For the arrangement of the several articles in the botanical and zoological chapters, for their generic and specific names, and for some of the observations on their nature and properties, I am indebted to the friendly assistance of the Rev. Dr. Manasseh Cutler, of Ipswich, and Mr. William Dandridge Peck, of Kittery.

will not be found in them for several years. The Spice-wood (*laurus benzoin*) or as it is commonly called Fever-bush, is another species of the *laurus*, common in New-Hampshire. It is more aromatic than the *sassafras*. In the western country, its fruit and bark are used as a substitute for *pimento*.

Wild Cherry. Of this we have many species; but they have not been well arranged, and properly distinguished. They are very numerous in land which has been newly cleared, if not kept down by culture. The wood of the largest cherry-tree (*prunus virginiana*) is very highly esteemed in cabinet work, being of a firm texture, a smooth grain, and a beautiful colour, between red and yellow.

Basswood or Lime-tree (*tilia americana*) is sometimes sawed into boards, which are very white, but soft, and easily warped.

Locust (*robinia pseudo-acacia*) is excellent fuel. Its trunk serves for durable posts set in the ground, and may be split into trunnels for ships, which are equal to any wood for that purpose. It thrives on sandy and gravelly soils, and its leaves enrich them. For these reasons, the cultivation of the locust has been thought an object worthy of attention, especially as it is a tree of quick growth. For several years past it has been injured by a beetle-insect, which bores a hole through its trunk. Many trees have been entirely killed, and this circumstance has proved a discouragement to their propagation.

Birch. Of this we have four species. 1. White (*betula alba*.) The bark of this tree is a substance of a singular kind, and is perhaps the only bark which is less liable to rot than the wood which it encloses. The whole interior substance of a fallen tree, is frequently found rotten, whilst the bark remains sound. This bark is composed of several *laminæ*, easily separable, of a firm consistence, thin, flexible, soft and

smooth. It may be written upon, like paper. It is very inflammable, emitting a vivid flame and a very dense, black smoke, which might easily be collected like lampblack. Of this bark the Indians formed dishes, boxes, and light portable canoes, which they sewed together with slender but tough filaments, of the roots of spruce and cedar, cementing the joints with turpentine. 2. Black (*betula nigra*.) The heart of this tree is of a beautiful brown, and is frequently split and turned. It makes handsome beds, chairs and tables. Much of it is exported to Europe. 3. Red or Yellow (*betula lenta*.) This is chiefly used for fuel, and is much esteemed. 4. Alder (*betula alnus*.) Its bark is much employed in dying a dark brown. The wood, when of a proper size, makes excellent charcoal. It is common in swamps and by the side of rivers and brooks.

Oak. Of this we have four species in New-Hampshire. 1. Black, (*quercus nigra*.) The inner bark is used for tanning. The timber for the keels of ships. 2. Red, (*quercus rubra*.) Of this species there are three varieties. (1.) The red, which grows sometimes on high and dry land, but delights in a moist soil, and is generally found on the declivities of hills and borders of swamps. The wood of this tree is easily riven, and makes excellent staves for molasses and for dry casks. (2.) The swamp oak, which is found in low wet places. It is possessed of greater elasticity than any other oak. Splints of this wood have been substituted for whalebone. (3.) Yellow, which grows on hills and dry ridges of land, makes the best of pipe staves and ship-timber.* 3. White. (*quercus alba*.) 4. Shrub oak. (*quercus prinus*.) It is found on barren hills and plains. It

* This arrangement of the oaks is suggested by Dr. Cutler. In common parlance, the oak, which is used for pipe-staves and ship timber, is called the upland white oak; it is one of the most useful and valuable trees of the American forest.

produces a gall, which is evidently the *nidus* of an insect, and has been used an ingredient in writing ink. There is another oak, called the *chestnut* or *new-found* oak ; but whether it be of a different species, or a variety of either species above-mentioned, has not been determined.

Walnut. The American species of this genus, have been confounded by botanical writers. There are at least three in New-Hampshire. 1. White or round nut Hickory. (*juglans alba*.) Its sap is sweet, but does not flow freely. Its wood is smooth and tough, and is much used for gun-stocks, axe-handles and walking-sticks. 2. Shag-bark (*juglans cineria*?)* The wood of this tree is not so valuable as the white ; but the fruit is preferable, being larger, and having a softer shell. 3. Oil-nut or Butter-nut. This species has been called, by some authors, *juglans alba*, and by others, *juglans nigra*. It differs specifically from both, and therefore Dr. Cutler has given it the distinguishing name of *juglans cathartica*, expressive of the peculiar property of its bark, the extract of which is one of the best cathartics in the *materia medica*. It neither produces gripings, nor leaves the patient costive, and may be made efficacious, without hazard, by increasing the dose. Its operation is kind and safe, even in the most delicate constitutions. It is an excellent family medicine, is well adapted to hospitals, navies and armies. It was much used by the military physicians, in the late war ; and it may become a valuable article of exportation. It is said to be one of the best antidotes against the bite of the rattle-snake. The fruit of this tree, when gathered young, in the beginning of July, makes an excellent pickle. When ripe, it is a fattening food

* ' I am uncertain whether this be the *cineria* of authors, and therefore have added the mark of interrogation. If it be not the *cineria* (to which the characters pretty well agree) it has no specific name.'

Dr. Cutler.

for swine. Its shell is black, hard and rough. Its kernel contains a large quantity of a rich sweet oil.* Its wood makes good fencing stuff; and its bark, besides the medicinal virtues which it possesses, has a quality of dying several shades of grey and black.

Chestnut, (*fagus castanea*) is chiefly used for fencing; it is straight, coarse grained, easily riven and very durable. It is sometimes split into staves and heading for dry casks.

Beech, (*fagus sylvatica*.) Of this there are three varieties. The white and the red are used as fuel. The black is small and tough, and is used only for withes and switches.

Hornbeam (*carpinus betulus*) is a small but tough tree, and is used only for levers, hand spikes and stakes.

Button-wood (*platanus occidentalis*) is a large tree, but as tough as the hornbeam. It is used for windlasses, wheels and blocks.

Pine. (*pinus*) Of this genus we have at least seven species. 1. The White Pine (*pinus strobus*) is undoubtedly the prince of the American forest in size, age and majesty of appearance. More of this species have been produced in New-Hampshire, and the eastern counties of Massachusetts than in all America besides. These trees have a very thin sap, and are distinguished by the name of mast-pine from the succeeding growth of the same species, which are called saplings. The blossom of this and other pines appears about the middle of June, its *farina* is of a bright yellow, and so subtil that it is exhaled with vapor from the earth, ascends into the clouds

* In the southern and western parts of the United States, this tree is found in very great abundance. The Indians preserved the oil which they extracted from the nut. Of this we have an early testimony in the journal of Ferdinando de Soto, A. D. 1540. When he came to Chiaha, situate near the Apalachian mountains, about the latitude of 34°, he 'found great store of oil of walnuts, clear as butter, and of good taste.' (*Purchas*, vol. 5. page 1539.) The Indians of New-England extracted an oil from acorns, by boiling them in water with ashes of punk, or the rotten heart of maple.

and falls with rain, forming a yellow scum on the surface of the water, which the ignorant erroneously call sulphur from the similarity of its colour.

When a mast tree is to be felled, much preparation is necessary. So tall a stick without any limbs nearer the ground than eighty or a hundred feet, is in great danger of breaking in the fall. To prevent this, the workmen have a contrivance which they call *bedding* the tree, which is thus executed. They know in what direction the tree will fall ; and they cut down a number of smaller trees which grow in that direction ; or if there be none, they draw others to the spot, and place them so that the falling tree may lodge on their branches ; which breaking or yielding under its pressure, render its fall easy and safe. A time of deep snow is the most favorable season, as the rocks are then covered, and a natural bed is formed to receive the tree. When fallen, it is examined, and if to appearance it be sound, it is cut in the proportion of three feet in length to every inch of its diameter, for a mast ; but if intended for a bow-spirit or a yard, it is cut shorter. If it be not sound throughout, or if it break in falling, it is cut into logs for the saw mill.

When a mast is to be drawn, as its length will not admit of its passing in a crooked road, a straight path is cut and cleared for it through the woods. If it be cut in the neighborhood of a large river, it is drawn to the bank and rolled into the water, or in the winter it is laid on the ice to be floated away at the breaking up of the river in the spring. From other situations masts are now conveyed twenty, thirty or forty miles to the landing places at the head of the tide, and as the distance has increased, more safe and easy modes of conveyance have been invented. Formerly, if drawn on wheels, the mast was raised by levers, and hung by chains under the axle.

In this case it was necessary to use very strong and heavy chains, and wheels of sixteen or eighteen feet in diameter, that the mast, in passing might be cleared from the ground, which was often encumbered with rocks and stumps. Now, the common wheels and chains are used, and the largest stick, by a very easy operation, is raised on the axle. To perform this, the wheels being brought near to it, are canted; the axle being set in a perpendicular position, one wheel on the ground and the other aloft. The mast is then rolled over the rim and spokes of the lower wheel, and fastened to the axle; and when it is thus fixed, a chain, which is previously made fast to the opposite side of the upper wheel, is hooked to a yoke of oxen; who, by a jerk, bring down the upper and raise the lower wheel, and thus both are brought into their proper position, with the mast mounted on the axle. They use two pair of wheels, one at each end of the mast; by which means, it is not galled by friction on the ground; and the draught is rendered much easier for the cattle.

When a mast is to be drawn on the snow, one end is placed on a sled, shorter, but higher than the common sort, and rests on a strong block, which is laid across the middle of the sled. Formerly, the butt end was placed foremost, and fastened by chains to the bars of the sled, which was attended by this inconvenience; that in sidelong ground, the stick by its rolling would overset the sled, and the drivers had much difficulty either to prevent or remedy this disaster, by the help of levers and ropes. The invention of the swivel chain precludes this difficulty. One part of this chain is fastened to the tongue of the sled, and the other to the smallest end of the mast, by means of a circular groove cut in it; one of the intermediate links is a swivel, which, by its easy turning, allows the stick to roll from side to side,

without overturning the sled. In descending a long and steep hill, they have a contrivance to prevent the load from making too rapid a descent. Some of the cattle are placed behind it; a chain which is attached to their yokes is brought forward and fastened to the hinder end of the load, and the resistance which is made by these cattle, checks the descent. This operation is called *tailing*. The most dangerous circumstance, is the passing over the top of a sharp hill, by which means, the oxen which are nearest to the tongues are sometimes suspended, till the foremost cattle can draw the mast so far over the hill, as to give them opportunity to recover the ground. In this case the drivers are obliged to use much judgment and care, to keep the cattle from being killed. There is no other way to prevent this inconvenience than to level the roads.

The best white pine trees are sold for masts, bowsprits and yards, for large ships.* Those of an inferior size, partly unsound, crooked, or broken in falling, are either fawn into planks and boards, or

* Douglas [vol. II. page 53.] speaks of a white pine, cut near Dunstable, in 1736, which was 'straight and sound, seven feet eight inches in diameter, at the butt end.' He also says, that when 'Col. Partridge' (formerly Lieutenant Governor of New-Hampshire) 'had the mast contract, he sent home a few of 38 inches, and two of 42 inches.'

I have obtained from the books of the late contractor, Mark Hunking Wentworth, Esq. deceased, the following account of the size and value of such sticks as he sent to England for the use of the navy.

Masts.		Yards		Bowsprits.	
Diameter in inches.	Sterling value.	Diameter in inches.	Sterling value.	Diameter in inches.	Sterling value.
	<i>L</i>		<i>L</i>		<i>L</i>
25	13, 8	15		25	2, 10
26	16,	16		26	3,
27	18,	17	6, 10	27	3, 14
28	28,	18	9	28	8, 2
29	28,	19	11, 4	29	15,
30	35, 10	20	14, 10	30	21,
31	44,	21	18, 10	31	26,
32	56,	22	21,	32	29,
33	70,	23	25, 10	33	32,
34	90,	24	32,	34	40,
				35	42, 10
				36	45,
				37	52, 10

N. B. It must be observed, that all these were hewn into the proper shape before the final dimensions were taken, which determined their value.

formed into canoes, or cut into bolts for the use of coopers, or split and shaved into clapboards and shingles. Boards of this wood are much used for wainscoting and cabinet work; it is of smooth grain, and when free from knots, does no injury to the tools of the workmen; but the softness of its texture subjects it to shrink and swell with the weather. The sapling pine, though of the same species, is not so firm and smooth as the veteran pine of the forest, and is more sensibly affected by the weather.

The stumps and roots of the mast pine are very durable. It is a common saying, that 'no man ever cut down a pine, and lived to see the stump rotten.' After many years, when the roots have been loosened by the frost, they are, with much labor, cut and dug out of the ground, and being turned up edge way, are set for fences to fields; in which state they have been known to remain sound for half a century. A collection of these roots would make an impenetrable *abbatis*, which nothing but fire could easily destroy.

Before the revolution, all white pines (excepting those growing in any township granted before the twenty-first of September, 1722) were accounted the King's property, and heavy penalties were annexed to the cutting of them, without leave from the King's surveyor. Since that event, these trees, like all others, are the property of the landholder.

(2.) The Yellow pine (*pinus pinea*) is harder and heavier than the white, but never grows to the same size; its planks and boards are used for the floors of houses and the decks of ships.

(3.) The Pitch pine (*pinus taeda*) is the hardest and heaviest of all the pines; it is sometimes put to the same uses as the yellow pine; but at present the principal use of it is for fuel. When burnt in kilns, it makes the best kind of charcoal; its knots

and roots being full of the terebinthine oil, afford a light surpassing candles; its foot is collected, and used for lamp black. The making of tar from it is now wholly disused. Formerly, when it was made, the method was this. A piece of clay ground was chosen; or if it could not conveniently be had, the earth was paved with stone or brick, in a circular form, about twelve or fifteen feet in diameter, raised in the middle, and a circular trench was drawn round it, a few inches in depth. The wood being cut and split, was set upright in a conical pile, and covered on every side with sods, a hole being left open at the top, where the pile was set on fire. The confined heat melted the resinous juices of the wood, which flowed out at the bottom into the circular trench, and was conducted by other gutters, to holes in the earth, in which were set barrels to receive it. Turpentine is collected from every species of the pine, by boxing the trees; that from the white pine is the purest; it sometimes distils from the tree in beautifully transparent drops.

4. The Larch (*pinus larix*) is the only tree of the terebinthine quality which sheds its leaves in autumn. Its turpentine is said to be the same with the Burgundy pitch.

(5.) The Fir (*pinus balsamea*) yields a fine balsam, which is contained in small blisters on the exterior surface of its bark. This balsam is used both as an external and internal medicine. The wood is coarser, and more brittle, than the pine, and is seldom either hewn or sawn.

(6.) Of Spruce (*pinus canadensis*) we have two varieties, the white and the black. The *white spruce* is tall and slender, its grain is twisting, and when stripped of its bark, it will crack in a warm sun. It is the worst wood for fuel, because of its continual snapping; in this respect it exceeds hem-

lock and chefnut ; both of which are remarkable for the same ill quality. It is sometimes formed into oars for large boats, but is inferior to ash. It is often used for spars, for fencing stuff and for scaffolding, for all which purposes, its form and texture render it very convenient, as it is straight and tough, and may be had of any size from two inches to two feet in diameter. The *black spruce* is used only for beer. The young twigs of it are boiled till the bark may easily be stripped from the wood, and being sweetened with molasses, make one of the most pleasant and wholesome beverages which nature affords. Of this spruce is made the essence, which is as well known in Europe as in America.

(7.) The Hemlock (*pinus abies*) is, in stature, the next tree to the mast pine. It grows largest in swampy land, and is very straight. Its grain is coarse, and is not easily split or hewn, but is sawed into planks, joists, and laths. Its chief excellence in building is, that it holds a nail exceedingly well. It makes good flooring for bridges and barns, and the round timber is very durable in wharfs and dams. The bark is excellent for tanning leather. The balsam of the hemlock is used medicinally; but it cannot be collected in any great quantities.

White cedar (*thuja occidentalis*.)

Red cedar (*juniperus virginiana*.)

‘ The white cedar of the southern States (*cupressus thyoides*) is a very different tree from the white cedar of the northern States ; but the red cedar is the same in all the States. It is a juniper, and a species of that in Europe which produces the juniper berries. The wood of the red cedar, is more durable, when set in the earth, than any other wood growing in this country.’

‘ We have another species of juniper (*juniperus sabina*) which does not rise more than eighteen inches from the ground ; but the branches extend hori-

‘zontally several yards ; and form, in open pastures, an extensive bed of evergreen. The leaves are mixed with oats, and given to horses to destroy the worms, which infest their bowels.’

White willow (*salix alba*) is originally an exotic, but now well naturalized and much propagated. The bark of this tree is used as a substitute for the ‘*cortex peruviana*.’

Swamp willow (*salix*) is the first tree that shows its blossoms in the spring. In some seasons, its white flowers exhibit a delightful appearance, when all the neighbouring trees remain in their wintry hue.

Poplar or Aspen (*populus tremula*.) This tree is more frequently found in open or clear land, than in thick woods. It is of quick growth. The wood is white, soft and smooth. It is used for lasts and heels of shoes, and for some kinds of turned work.

Black poplar or Balsam tree. This is a beautiful forest tree, of a large size, and quick growth ; very proper for walks and shades. Its buds, in the spring, are full of a rich balsam, resembling the balsam of Peru. As the buds expand the balsam disappears.

Of the Maple we have three species. 1. The white (*acer negundo*) especially that which is curled in its grain, is much used in cabinet work ; it is firm and smooth ; it takes a fine polish, and may be stained of the colour of black walnut or mahogany. 2. The red (*acer rubrum*) grows in swamps, and is fit only for fuel. 3. The black or rock maple, exceeds the others in this respect, being of a very close texture, hard and heavy, even when perfectly dry. But the grand excellency of this tree, is the saccharine quality of its sap, which has obtained for it the name of Sugar maple, (*acer saccharinum*.)

Those trees which grow in cleared land, do not yield sap in such quantities as those which grow in the thick woods ; but it is richer. The same dif-

ference is observed between those which grow in wet and in dry land.

To procure the sap, an incision is made by two scores, an inch and half, or two inches deep, and from six to eight inches long, in the form of the letter V. This method of tapping causes the tree to bleed very freely, and in two or three years, kills it; a circumstance not much regarded where the trees are numerous, and a continual succession of them, may be had; but if care be taken to tap them, by making a small circular incision, and filling it with a plug when the season is past, the bark will cover the wound, and the tree will last many years. From the lower part of the incision, the sap is guided by a small stick into a trough, containing two or three gallons. These troughs are made by cutting the pine, or some other soft wood, into pieces of a yard long, and splitting them in halves, a cavity is then made in each half, by a narrow axe, and so expert are the woodmen at this business, that one of them will make thirty or forty in a day. Larger troughs or vats, are placed in a central situation, to serve as reservoirs for the sap when collected.

The season for tapping the trees is in March, and the sap will not run but in a clear day, succeeding a frosty night. A full grown tree will then yield from two to three gallons each day. The persons employed in the business, visit each tree, and, collecting the sap in buckets, remove it to the larger troughs, or, if the ground be very extensive, it is put into barrels, which are drawn on sleds to the place appointed for boiling. The kettles in which it is boiled, are commonly the same which are used for culinary purposes, suspended in the usual manner, but the best way is to use broad kettles, set in brick or stone, with the fire confined under the bottom, and not flaming up round the sides, in which

case there is danger of burning the sugar. As the sap evaporates the kettles are filled up, the boiling is continued, and the liquor is skimmed till it becomes a thick syrup. In this state it may rest for a week, and in the mean time, more of the sap may undergo the same process, and be reduced to a less quantity.

The next operation is granulating, which may be done on a cloudy day, when no sap can be collected. But if there be a succession of fair weather, the trees will discharge so fast, that the collection must be attended to by day, and the boiling by night. When the syrup is to be granulated, the boiling is repeated. The kettle is then not more than half filled, to prevent waste. To check the too sudden rising of the liquor, a small piece of clean butter or tallow is occasionally thrown in. To know when it will granulate, a little of it is taken out and cooled, and when it appears to be in this state, the whole is poured into a cooler. After the grain is formed, it is hung in bags to drain. A small quantity of quick lime, put into the liquor, as is usual in the West-Indies, would promote and improve the granulation.

In every stage of the work much neatness is required. The sap must be strained through a flannel sieve before the first boiling, to clear it of chips, leaves and other adventitious substances ; and before the second boiling, it must undergo another straining. When the season is over, the troughs are either piled in a dry place, bottom upward, or set on end against the trees, to be kept clean for another season. The sugar, thus procured, is, by some of the neatest workmen, rendered as white as the finest muscovado. It is an agreeable sweet, frequently supplying the place of milk and meat, and affording wholesome and nourishing food for children.

The drainings of the sugar, or the last run of the sap, which will not granulate, are used as molasses, to sweeten cakes, puddings and other viands. A very palatable and refreshing beer is made by boiling down the sap to a quarter part, and fermenting it with yeast, and another extremely wholesome liquor, is obtained from the decoction of spruce in the sap. Vinegar also is made by exposing the sap to the air.

The sugar, thus extracted from the maple, is clear gain to the industrious husbandman. It is made at a time of the year when no field labor can be done. The ground is then covered with snow, which being hardened by the frost, will bear a man's weight. One man and a boy have collected a sufficiency of sap for five hundred pounds of sugar, and a man, with two boys, for seven hundred. The boiling is often performed by women. These trees are found in many parts of the country; but they abound most in the lands between the White mountains and Connecticut river. The wood is very suitable for the use of carpenters, who make of it felloes of wheels, where oak cannot easily be procured, as is the case in a great extent of country in the north-western part of the state.

Of Ash we have two species. 1. The White Ash (*fraxinus excelsior*) in good land, grows to the size of three feet in diameter. It is very tall, straight and tough. Its leaves and bark are an antidote to the venom of the rattle-snake. The wood is easily riven, and makes durable rails for fences. It is also formed into oars and handspikes, and serves for the frames of ploughs, carts, sleighs, and riding carriages, and for the handles of many useful tools in agricultural and mechanical employments. 2. The other species is Black Ash (*fraxinus americana*) of which the Red and Yellow are varieties. Splints of

the wood of Ash are obtained by pounding it with a maul, and are employed in making baskets and brooms. This knowledge was probably derived from the Indians. The roots of yellow Ash, are used by turners, for the making of plates and bowls.

After going through the catalogue of forest trees, it may be proper to observe, that all woods, which grow on high land, are more firm and solid, and better for timber or fuel, than those which grow in swamps. The same difference may generally be observed between those in the open grounds, and those in the thick shade of the forest. The pine is an exception to this remark; but whether the immense age or superior stature of the forest pine be the causes which render it more firm than that which is found in the pastures, cannot at present be ascertained.

From several experiments made by the Count de BUFFON, it appears that the wood of trees, stripped of their bark in the spring, and left to dry standing till they are dead, is harder, heavier and stronger, more solid and durable than that of trees felled in their bark; and that the sappy part of wood, without bark, is not only stronger than the common, but much more so than the heart of wood in bark, though less heavy. The physical cause of this augmentation of strength and solidity he thus explains. 'Trees increase in size by additional coats of new wood, which is formed from the running sap between the bark and the old wood. Trees stripped of their bark, form none of these new coats, and though they live after the bark is taken off they do not grow. The substance destined to form the new wood, finding itself stopped and obliged to fix in the void places both of the sap and heart, augments the solidity and consequently the strength of the wood.'*

* Nat. Hist. Vol. v. p. 267. It must be observed that his experiment were made on oaks.

Beside the immense quantity of living wood with which the forest abounds, nature hath provided an ample store of that fossil, ligneous substance called *peat*. It appears to be formed of the deciduous parts of trees and shrubs, preserved in a peculiar manner, in the earth. It is usually found in swamps between or under hills, where it has been accumulating for many ages. The decayed vegetation of one period having served as a soil in which another growth has taken root and come to maturity. In the town of Dover are two swamps, which, within the last twenty-five years, have been cleared of the stumps and roots of the latest growth, which were pine and hemlock. In digging them up, another tier of stumps was found under them, the roots of which were found; and in some instances a third stump appeared under the second. In such swamps is found the peat; in which the shape of twigs, bark and leaves is very apparent; but on pressure it is consolidated into a soft fatty substance. This being dug in spits of a proper size, and dried, becomes valuable fuel; of which, though at present little use is made, yet posterity will doubtless reap the benefit.*

* I very much doubt your doctrine of *peat*. It appears to me to be a substance *sui generis*. Deciduous parts of trees and shrubs are often found mixed with it. But its inflammable property, I conceive, does not depend on the mere adventitious collections of decayed vegetables; for although peat is found in places favourable to such collections, yet it is not found in every place where those collections have been made. Besides, in all the peat I have examined, there are numerous fibres of a singular construction, variously ramified; in some kinds they are extremely fine, in others as large as a pack thread. When the peat is first taken from the pit, the threads may be traced a considerable length, and, when washed, they have an appearance which has induced me to suspect a vegetable organization. If they are a living vegetable, they seem to form the link between the vegetable and fossil kingdom. It seems most probable, if those fibres are not vegetable *sui generis*, they may be the fibrous roots of a bed of some particular species of moss, upon which there has been a large collection of matter, which has buried them a certain depth under ground, where they are not subject to putrefaction. But there seems to be an inflammable fossil in the composition of peat, different from the earth commonly found in similar places. I am told some peat appears to be entirely a fossil, though I have never seen any such. It is as easy to conceive of such a fossil as of pit-coal. If the fossil contains the inflammable principle, it is not derived from deciduous vegetables. Have you never heard of its growing again where it has been dug out? One of my neighbours has often told me that a ditch was dug through a meadow in his farm, many years ago, where there is a body of peat; that the depth of

It is not my intention to write, systematically, the natural history of the country, or to describe, with botanical accuracy, the indigenous vegetables which it contains; but briefly to take notice of such as are endowed with the most remarkable qualities, either salutary or noxious.

Of Grapes we have two species. The black grape (*vitis labrusca*) and the fox-grape (*vitis vulpina*.) Of these there are several varieties. From the specimens of foreign grapes, which ripen in our gardens, there is sufficient reason to believe that the culture of vines, in favorable situations, might be attended with success. This opinion is corroborated by the judgment of foreigners, occasionally resident with us.

The black Currant (*ribes nigrum*) is a native of our swamps, and is much improved by culture. It is not much used as food, but is an excellent medicine for a sore mouth and throat.

The wild Gooseberry (*ribes grosularia*) is very common in the borders of woods, and has been greatly meliorated by cultivation.

We have several species of Whortleberries (*vaccinium corymbosum*) which grow in great abundance and serve as wholesome and palatable food; some of them are dried for winter.

The Craneberry (*vaccinium oxycoccos*) is a fruit peculiar to America. The common species grows on a creeping vine in meadows. The branches of the vine take root at the joints, and overspread the ground to the extent of an acre. The berries hang on very slender stalks. At first they are white, but turn red as they ripen, and when full grown, are of

the ditch exceeded the depth of the peat; and that the peat has pushed out on both sides so as nearly to meet in the center, but the sides of the ditch above and below, remain much the same, except some little change, which the length of time has produced. I have not seen the place; but were I assured of this fact, I should be inclined to believe the fibres to be living vegetables, and the fossil to be possessed of the property of spar, with regard to the increase of its bulk; and that these two substances were mutually dependent on each other.

the size of a cherry. They yield an agreeable acid juice, and, when stewed and made into a jelly, are extremely cooling in a fever, and a delicious sauce at the table. They may be kept a long time in water, and suffer no injury from the frost. They are frequently sent abroad, and are highly refreshing at sea. The best way to preserve them for long voyages, is to put them up, clean and dry, in bottles, closely corked. There is another species of cranberry, which grows in clusters on a bush, but it is not so large nor so common as the other.

The common Raspberry (*rubus idæus*) is found in the most exuberant plenty in the new plantations, and in the old, by the sides of fields and roads. The superb raspberry (*rubus canadensis*) is larger and more delicate. Its blossom is purple, and its leaves are sometimes a foot in diameter.

The Brambleberry (*rubus occidentalis*.) The running Blackberry (*rubus moluccanus*.) The upright Blackberry (*rubus fruticosus*) are also very common, especially in the newly cleared land, and afford an agreeable refreshment.

The Strawberry (*fragaria vesca*) in some parts of the country, is very luxuriant in new fields and pastures; but it is capable of great improvement by cultivation.

The Hazle-nut (*corylus avellana*) is found in the neglected parts of pastures, and by the sides of rivers.

There are two species of Ground-nuts. One (*helianthus tuberosus*) bears a yellow blossom, resembling the sunflower. The other (*glicine apios*) is a vine, which twines itself about bushes, and bears a blossom and fruit resembling a pea. The roots were much used for food by the Indians, and are indeed very palatable. I know not whether they have been cultivated; but the former might be planted like the potatoe.

Besides these, there are several kinds of plums, and other wild fruits, which have not been reduced to a systematical order, nor distinguished by any but trivial names.

There is a great variety of native vegetables, which are used for medicinal and domestic purposes. Among these may be reckoned the following :

The Bayberry (*myrica cerifera*) the leaves of which yield an agreeable perfume, and the fruit a delicate green wax, which is made into candles. Ginseng (*panax trifolium*) so much esteemed by the Chinese, is found in great plenty in the western part of the State, and it is said that the farther northward it is found, the better is its quality. It was formerly thought that the ginseng grew only in China and Tartary; but it was discovered in America about the year 1750, and some specimens of it having been sent to England, and thence to China, it was, on trial, acknowledged, by the Chinese themselves, to be the same with the oriental ginseng.

The proper time for gathering this root, is in September, just before the frost kills the stem. The way of curing it in China, is thus related. ‘After the ginseng is gathered, it is cleaned, then dipped in scalding water, and the ligneous bark rubbed off with a piece of dry flannel. It is then laid across sticks, over a vessel, in which yellow millet* is boiling, with a gentle fire, and covered with a cloth. The steam of the boiling millet gives it that colour which is admired by the Chinese. When the roots are thus prepared, they must be dried and kept close, otherwise they will corrupt or be destroyed by worms.’ This root once promised to be a valuable article of commerce with China; but the sale of it has been greatly injured by

* Millet is very easily cultivated, and yields a vast increase. I have counted ten thousand grains on one stalk.

the loose and careless manner in which it has been packed, and the too great quantity which has been at once exported. It might however, by some proper regulations, be still rendered advantageous.

The prickly ash (its genus unknown) is a shrub, growing in moist places, and sometimes rising into a small tree. It is armed with *spiculæ*, like the locust. The bark has a high degree of warmth and pungency; with which, in the seed, is combined an agreeable *aroma*. The former is esteemed an excellent remedy for the chronic rheumatism. The latter were used by the soldiers, in the late war, and by many other people, remote from the trading towns, as a substitute for pepper in seasoning food. It is chiefly found in the western part of the State.

The Garget (*phytolacca decandra*) is a valuable plant. Its berries yield a beautiful purple juice, which might be used in dying. Its root is in great repute among farriers.

Of the Elder there are two species, black (*sambucus nigra*) and red (*viburnum opulus*.) The former is too well known to need any description; as are the Maiden-hair (*adiantum pedatum*) the Sarsaparilla (*aralia*) Snake root (*polygala senega*) and many others.

There are several plants, the virtues of which were well known to the Indians, but are now either neglected or unknown. One of these is a running vine, bearing a small red berry, and a round leaf, which Josselyn (who wrote in 1672) says, the fishermen called *poke*;* it is known to the hunters by the name of *Indian tobacco*, and it was used by the natives, before their acquaintance with the Europeans, for smoking, and afterwards was frequently mixed with the true tobacco from the southern parts of America. It has a strong narcotic quality. It

* *Poke* is the name by which the garget is known in the middle States.

grows on the fummit of Agamenticus ; and on many other mountains and dry elevated places.

Another is the Indian Hemp (*afclepias*) of which the Indians made their bow-strings. The fibres of its bark are strong, and may be wrought into a fine thread. The Silk Grass, another species of the *afclepias*, bears a pod, containing a down, which may be carded and spun into candle wicks.

The Witch Hazel (*hamamelis*) was much used by the Indians, as a remedy for inflammations.

We have at least three species of the *lobelia* ; one of which is a strong emetic ; another (*lobelia cardinalis*) is employed in the cure of a disease, with the name of which I will not stain my page.

The vine, called Buck Bean (*menyanthes*) is said to be a rare plant in this country, and of singular use in medicine. It grows at Jaffrey, near the grand Monadnock.

The *arum*, or Skunk Cabbage, has been found very efficacious in asthmatic complaints.

It may be proper to close this account of indigenous vegetables, with the names of those plants, which, under certain circumstances, operate as poisons ; some of which, however, have been brought into a medicinal use, and are in repute for the cure of disorders, attended with spasmodic affections. Of this latter sort, are the Hemlock (*cicuta*) the Thorn Apple (*datura stramonium*) the Henbane (*hyoscyamus niger*) and the night shade (*solanum nigrum*.) Other poisonous plants, are the Ivy (*hedera helix*) the creeping Ivy, or, as it is called by some, Mercury (*rhus radicans*) the juice of which stains linen a deep and indelible black ; the Swamp Sumach (*rhus toxico dendrum*) the Walter Elder (*viburnum opulus*) the herb Christopher (*actaea spicata*) the Stinking Snakeweed (*cliffortia trifoliata*) and the White Hellebore (*veratrum album*.)

C H A P. IX.

Soil, Cultivation and Husbandry.

THERE is a great variety of soil in New-Hampshire. The intervale lands on the large rivers, are accounted the most valuable, because they are overflowed and recruited every year by the water from the uplands, which brings down a fat slime or sediment, of the consistence of soap. These lands produce every kind of grain in the utmost perfection; but are not so good for pasture as the uplands of a proper quality. The wide spreading hills of a moderate elevation, are generally much esteemed, as warm and rich; rocky moist land is accounted good for pasture; drained swamps have a deep mellow soil, and the valleys between hills are generally very productive.

In the new and uncultivated parts, the soil is distinguished by the various kinds of woods which grow upon it, thus: White oak land is hard and stony, the under growth consisting of brakes and fern; this kind of soil will not bear grass till it has been ploughed and hoed; but it is good for Indian corn, and must be subdued by planting, before it can be converted into mowing or pasture. The same may be said of chestnut land.

Pitch pine land is dry and sandy; it will bear corn and rye with ploughing; but is soon worn out, and needs to lie fallow two or three years to recruit.

White pine land is also light and dry, but has a deeper soil, and is of course better; both these kinds of land bear brakes and fern; and wherever these

grow in large quantities, is an indication that ploughing is necessary to prepare the land for grafs.

Spruce and hemlock, in the eastern parts of the State, denote a thin, cold foil; which, after much labor in the clearing, will indeed bear grafs without ploughing, but the crops are small, and there is a natural tough sward commonly called a *rug*, which must either rot or be burned before any cultivation can be made. But in the western parts, the spruce and hemlock, with a mixture of birch, denote a moist foil, which is excellent for grafs.

When the white pine and the oyl-nut are found in the same land, it is commonly a deep moist loam, and is accounted very rich and profitable.

Beech and maple land is generally esteemed the most easy and advantageous for cultivation as it is a warm, rich, loamy foil, which easily takes grafs, corn and grain without ploughing; and not only bears good crops the first year, but turns immediately to mowing and pasture; that foil which is deepest, and of the darkest colour, is esteemed the best.

Black and yellow birch, white ash, elm and alder, are indications of good foil, deep, rich and moist, which will admit grafs and grain without ploughing.

Red oak and white birch are signs of strong land, and generally the strength of land is judged of by the largeness of the trees which it produces.

There are evident signs of a change in the growth on the same foil, in a course of time; for which no causes can be assigned. In some places the old standing trees, and the fallen decayed trees, appear to be the same, whilst the most thriving trees are of a different kind. For instance, the old growth in some places is red oak, or white ash; whilst the other trees are beech and maple, without any young

oak or ash among them. It is probable that the growth is thus changed in many places ; the only conclusion which can be drawn from this circumstance, is, that the same soil is capable of bearing divers kinds of trees ; but still there is a difference sufficient to denominate the soil from the growth.

Several ways of raising a crop on new land have been practised. The easiest and cheapest method was originally learned of the Indians, who never looked very far forward in their improvements. The method is that of girdling the trees ; which is done by making a circular incision through the bark, and leaving them to die standing. This operation is performed in the summer, and the ground is sowed in August, with winter rye, intermixed with grass. The next year, the trees do not put forth leaves, and the land having yielded a crop, becomes fit for pasture. This method helps poor settlers a little the first year ; but the inconvenience of it is, that if the trees are left standing, they are continually breaking and falling with the wind, which endangers the lives of cattle ; and the ground being constantly encumbered by the falling trees, is less fit for mowing ; so that if the labor be not effectually done at once, it must be done in a succession of time.

Some have supposed, that the earth, being not at once, but by degrees exposed to the sun, preserves its moisture, and does not become so hard ; but the experience of the best husbandmen has exploded this opinion. The more able sort of husbandmen, therefore, choose the method of clearing the land at first, by cutting down all the trees without exception. The most eligible time for this operation, is the month of June, when the sap is flowing, and the leaves are formed on the trees. These leaves will not drop from the fallen trees, but remain till the

next year, when, being dry, they help to spread the fire, which is then set to the trees. This is done in the first dry weather of the succeeding spring, and generally in May ; but if the ground be too dry, the fire will burn deep, and greatly injure the soil. There is therefore need of judgment to determine when the wood is dry enough to burn, and the soil wet enough to resist the action of the fire. Much depends on getting what is called a *good burn*, to prepare the ground for planting. To ensure this, the fallen trees are cut and piled ; and the larger the pile, the better chance there is for its being well burned. But if the land be intended for pasture only, the trees are cut down, and after the fire has destroyed the limbs, grass is sown, and the trunks of the trees are left to rot, which, in time, turn to good manure, and the pasture is durable.

Some husbandmen prefer felling trees in the winter, or very early in the spring, before the snow is gone. The advantage of this method is, that there are fewer shoots from the stumps of the felled trees, than if they are cut in the summer ; these shoots encumber the ground, and must be cut out of the way, or destroyed by fire. The disadvantage of cutting trees in the winter is, that they will not dry so soon, nor burn so well, as those cut in the summer, with the leaves on. Besides, the month of June is a time when not only the trees are easiest to be cut, but the seed is in the ground, and people can better attend to this labor, than when they are preparing for their spring work, or have not finished their winter employments. The days too are then at their greatest length, and more labor can be done in the course of a day. This labor, however, is often paid for by the acre, rather than by the day ; and the price of felling an acre, is from one to two dollars, according to the number and size of the trees.

The burning of trees generally destroys the limbs and smaller trunks ; the larger logs are left scorched on the ground, and sometimes serve to fence the field. After the fire has had its effect, and is succeeded by rain, then is the time for planting. No plough is used, nor is it possible for one to pass among the roots and stumps ; but holes are made with a hoe in the loose soil and ashes ; in which, the seed being dropped and covered, is left to the prolific hand of nature ; no other culture being necessary or practicable, but the cutting of the fireweed, which spontaneously grows on all burnt land. This fireweed is an annual plant, with a succulent stalk and long jagged leaf ; it grows to the height of five or six feet, according to the strength of the ashes. It bears a white flower, and has a winged seed, which is carried every where by the wind, but never vegetates, except on the ashes of burnt wood. It exhausts the ground, and injures the first crop, if it be not subdued ; but after the second year disappears. About the second or third year, another weed, called pigeon-berry, succeeds the fireweed, and remains till the grass overcomes it. It rises to the height of three feet, spreads much at the top, and bears bunches of black berries, on which pigeons feed.

When the trees are burnt later in the summer, wheat or rye is sown, mixed with the seeds of grass, on the new land. The seed is scattered on the surface, and raked in with a wooden or iron tooth rake, or a hoe. The husbandman knows on what kind of land to expect a crop, from this mode of culture ; and is seldom disappointed. Sometimes a crop of Indian corn is raised the first year, and another of rye or wheat, the second year, and the land is sown with grass, which will turn it into pasture or mowing the third year. The first crop, in some land,

and the two first crops in any good land, will repay the expence of all the labor. It is not an uncommon thing for people, who are used to this kind of husbandry, to bring a tract of wilderness into grass for the two first crops ; the owner being at no expence but that of felling the trees and purchasing the grass feed. Many husbandmen, in the old towns, buy lots of new land, and get them cleared and brought into grass, in this way, and pasture great numbers of cattle ; the feed is excellent, and the cattle are soon fatted for the market.

Husbandmen differ in their opinions concerning the advantages of tilling their new land the second year. Some suppose that mixing and stirring the earth, does it more good than the crop injures it ; others say, that one crop is sufficient before the land is laid down to grass ; and that if it be sown with grain and grass, as soon as it is cleared, the large crops of grass which follow, will more than compensate for one crop of grain. When the feeding with grass is neglected, the ground becomes mossy and hard, and must be ploughed before it will receive feed. Land, thus sown, will not produce grass so plentifully, as that which is feeded immediately after the fire has run over it. Besides, this neglected land is generally overspread with cherry-trees, raspberry bushes, and other wild growth ; to subdue which, much additional labor is required. In good land, the first crops of hay are, on an average, a ton to an acre. That land which is intended for mowing, and which takes the common grass well at first, is seldom or never ploughed afterward ; but where clover is sown, it must be ploughed and seeded every fourth or fifth year ; good land, thus managed, will average two tons of clover to the acre.

In the intervale land on Connecticut river, wheat often yields forty, and sometimes fifty bushels to the

acre ; but in common upland, if it produce twenty bushels, it is reckoned profitable, though it often falls short of that. Indian corn will sometimes average thirty or forty ; but it is to be observed that this latter grain does not produce so largely, nor is the grain so heavy on new as on the old lands well cultivated. This however is owing much to the lateness of the season in which it is planted ; if planted as early on the newly burnt land as on the old, it will be nearly as good. Of all grains, winter rye thrives best on new lands, and Indian corn, or barley, on the old. Barley does not succeed well in the new land ; nor is flax raised with any advantage, until the land has been cultivated for some years. The same may be said of oats and peas ; but all kinds of esculent roots, are much larger and sweeter in the virgin soil, than in any other.

The mode of clearing and cultivating new lands, has been much improved within the last thirty years. Forty years ago it was thought impossible to raise Indian corn without the plough and the hoe. The mode of planting it among the burnt logs, was practised with great success at Gilman-town, about the year 1762, and this easy method of culture soon became universal in the new plantations. It is now accounted more profitable for a young man to go upon new, than to remain on the old lands. In the early part of life, every day's labor employed in subduing the wilderness, lays a foundation for future profit : Besides the mode of subduing new land, there has been no improvement made in the art of husbandry. The season of vegetation is short, and is almost wholly employed in preparing, planting and tilling the land, in cutting and housing fodder, and gathering in the crops. These labors succeed invariably, and must

be attended to in their proper season ; so that little time can be spared for experiments, if the people in general were disposed to make them. Indeed, so sudden is the succession of labors, that upon any irregularity in the weather, they run into one another ; and if help be scarce, one cannot be completed before the other suffers for want of being done. Thus hay is often spoiled for want of being cut in season, when the English harvest is plentiful. It is partly from this cause, partly from the ideas of *equality* with which the minds of husbandmen are early impressed, and partly from a want of education, that no spirit of improvement is seen among them, but every one pursues the business of sowing, planting, mowing, and raising cattle, with unremitting labor and undeviating uniformity.

Very little use is made of any manure excepting barn dung ; though marl may be had in many places, with or without digging. The mixing of different strata, is never attended to, though nature often gives the hint by the rain bringing down sand from a hill on a clay bottom ; and the grass growing there in greater beauty and luxuriance than elsewhere. Dung is seldom suffered to remain in a heap over the summer, but is taken every spring from the barn, and either spread over the field and ploughed in, or laid in heaps, and put into the holes where corn and potatoes are planted.

Gardens, in the country towns, are chiefly left to the management of women, the men contenting themselves with fencing and digging them ; and it must be said, to the honor of the female sex, that the scanty portion of earth, committed to their care, is often made productive of no small benefit to their families.

As the first inhabitants of New-Hampshire came chiefly from the southwestern counties of England,

where cider and perry were made in great quantities, they took care to stock their plantations with apple trees and pear trees, which thrive well, and grew to a great size. The first growth is now decayed or perished ; but a succession has been preserved, and no good husbandman thinks his farm complete without an orchard. Perry is still made in the old towns, bordering on Piscataqua river ; but in the interior country the apple tree is chiefly cultivated. In many of the townships, which have been settled since the conquest of Canada, young orchards bear well, and cider is yearly becoming more plentiful.

Other fruits are not much cultivated, but from the specimens which some gardens produce, there is no doubt that the cherry, the mulberry, the plum and the quince, might be multiplied to any degree. The peach does not thrive well ; the trees being very short lived. The apricot is scarcely known. The white and red currant grow luxuriantly, if properly situated and cultivated. The barberry, though an exotic, is thoroughly naturalized, and grows spontaneously in hedges or pastures.

The following remarks are suggested by an ingenious friend :*

‘ In regard to tree-fruit, we are in too northern a climate to have it of the first quality, without particular attention. New-York, New-Jersey, and Pennsylvania, have it in perfection. As you depart from that tract, either southward or northward, it degenerates. I believe, however, that good fruit might be produced even in New-Hampshire, with suitable attention. A proof of this is, that sometimes we have it by mere chance. In theorizing on the subject, three things appear to me particularly necessary, all which are totally neglected by the generality of our husbandmen. The *first*, after procuring thrifty

* Dr. Samuel Tenney, of Exeter.

young trees of the best kinds, and grafting such as require it, is, to choose a situation for them, where they may have the advantage of a warm rich soil, and be well sheltered from the chilling blasts of the ocean. The *second*, is to keep the trees free from superfluous branches, by a frequent use of the pruning-hook, and the earth always loose about their roots. The *third*, is to defend the trees from insects, particularly those which by feeding on the fruit, render it small and knotty, as we frequently find apples and pears ; or by depositing their eggs in the embryo, occasion its falling off before it comes to maturity, as is observable in the various kinds of plums. But the most of our farmers go on the path traced out by their ancestors, and are generally averse to making experiments, the result of which is uncertain, or to adopting new modes of husbandry, the advantages of which, are in the smallest degree problematical. There are few cultivators among us who theorize, and still fewer who read.'

It has often been complained that grain, flax, and esculent vegetables, degenerate. This may be ascribed to the seed not being changed, but sown successively, on the same soil, or in the same neighbourhood, for too long a time. 'The Siberian wheat, for several years, produced good crops ; but becoming at length naturalized to the climate, it shared the fate of the common kind of wheat, and disappointed the expectations of the farmer. Were the seed renewed every five or six years, by importations from Siberia, it might be cultivated to advantage.' It must be observed that the Siberian wheat which was sown in New-Hampshire, about twelve years ago, was brought hither from England, where it had been sown for several preceding years. Whether an intermediate stage is favorable to the transplantation of seed from north to south, and the

success of its cultivation, may be worthy of inquiry. With respect to plants, which require the whole season to grow in, it is observed that 'the removal of them from south to north ought to be by short stages; in which case they accommodate themselves, by insensible degrees to the temperature and length of the vegetating term, and frequently acquire as good a degree of perfection in foreign climes, as in their native soil. Such are the resources of nature!'

Agriculture is, and always will be, the chief business of the people of New-Hampshire, if they attend to their true interest. Every tree which is cut down in the forest, opens to the sun a new spot of earth, which with cultivation, will produce food for man and beast. It is impossible to conceive what quantities may be produced of beef, pork, mutton, poultry, wheat, rye, Indian corn, barley, pulse, butter and cheese, articles which will always find a market. Flax and hemp may also be cultivated to great advantage, especially on the interval lands of the large rivers. The barley of New-England is much esteemed in the middle States, and the demand for it is so great, as to encourage its cultivation. It is, besides, a kind of grain which is not liable to blast. Hops will grow on almost any soil; and the labor attending them is so inconsiderable, that there can be no excuse for neglecting the universal cultivation of them. The consumption of them, and consequently the demand for them as an article of commerce, is continually increasing.

The first *neat cattle* imported from Europe into New-Hampshire, were sent by Captain John Mason and his associates, about the year 1633, to stock their plantations, and to be employed in drawing lumber. These cattle were of a large breed, and a yellow colour, procured from Denmark. Whilst the business of getting lumber was the chief employ-

ment of the people, the breeding of large cattle was more attended to than it is now. Calves were allowed to run with the cows, and suck at their pleasure. Men were ambitious to be distinguished by the size and strength of their oxen. Bets were frequently laid on the exertions of their strength, and the prize was contended for as earnestly as the laurel at the Olympic games. This ardor is not yet wholly extinguished in some places ; but, as husbandry hath gained ground, less attention is paid to the strength, and more to the fatness of cattle for the market, and calves are deprived of part of their natural food, for the advantage of butter and cheese.

As the country becomes more and more cleared, pasture for cattle increases, and the number is continually multiplied. From the upper parts of New-Hampshire, great herds of fat cattle are driven to the Boston market ; whence the beef is exported fresh to Nova-Scotia, and salted to the West and East-Indies.

At what time and by whom the *horse* was first imported does not appear. No particular care is taken by the people in general, to improve the breed of this majestic and useful animal, and bring it to that perfection of which it is capable. The raising of colts, is not accounted a profitable part of husbandry, as the horse is but little used for draught, and his flesh is of no value. The proportion of horses to neat cattle, is not more than one to twenty. Few live and die on the plantations where they are bred ; some are exported to the West-India Islands ; but the most are continually shifted from one owner to another, by means of a set of contemptible wretches called horse-jockies.

Asses have been lately introduced into the country ; the raising of mules deserves encouragement, as the exportation of them to the West-Indies, is more

profitable than that of horses, and they may be used to advantage in travelling or carrying burdens in the rough and mountainous parts of our wilderness.

Sheep, goats and swine, were at first sent over from England, by the associates of Laconia. *Sheep* have greatly multiplied, and are accounted the most profitable stock which can be raised on a farm. The breed might be renewed and improved by importing from Barbary, the *mufflon*, which is said to be the parent stock of the European, and consequently of the American sheep. *Goats* are not much propagated, chiefly because it is difficult to confine them in pastures. *Swine* are very prolific, and scarcely a family is without them. During the summer, they are either fed on the waste of the dairy and kitchen, or ringed and turned into fields of clover; or permitted to run at large in the woods, where they pick up nuts and acorns, or grub the roots of fern; but after harvest they are shut up, and fattened on Indian corn. The pork of New-England is not inferior to any in the world.

Domestic poultry of all kinds, is raised in great plenty and perfection in New-Hampshire. In some of the lower towns they have a large breed of fowls, which were imported from England about twenty years past; but this breed is permitted to mix with the common sort, by which means it will, in time, degenerate. The stock of all domestic animals, ought frequently to be changed, if we would preserve them unimpaired, or restore them to their original perfection.

CHAP. X.

Native Animals.

AS the animals of this part of America have not been accurately examined by naturalists, neither a complete description, nor even a perfect catalogue, can be expected. The greater part are known by vernacular names, and some of these are adopted from the Indians; but so variously, and often erroneously, are these names applied, that the information derived from them, is to be received with caution. Formal descriptions, even those which are diffuse, sometimes prove defective, from the want of a knowledge of those *essential* characters by which the arrangement of animals is made. The following catalogue, arranged in the order of Linnaeus, is intended to give a general idea of this branch of our natural history. Some remarks are added, which may elucidate the qualities of some of the animals, together with the manner of rendering them subservient to the purposes of human life, or of guarding ourselves against the noxious dispositions with which some of them are endowed.*

QUADRUPEDS,

Seal (*phoca vitulina.*)

Wolf (*canis lupus.*) This animal is very common, and very noxious. A bounty of twenty dollars is, by law, paid for his head, and if it were doubled, the breed of sheep would be augmented sufficiently to make up the difference. He is frequently taken

* Those animals which have not been particularly examined, or which in the characters do not appear to accord with the Linnaean description, are distinguished by the note (?) of interrogation. Specific names are given to such as evidently appeared to be a new species, and these names, by the express desire of Dr. CUTLER, are printed in italic capitals.

in log traps, and, to decoy him, the hunters scent the ground with a drug, of which they affect to make a secret. Josselyn tells of another method of destroying wolves ' by binding four mackarel hooks with ' thread, and wrapping some wool about them, and ' then dipping them in melted tallow till a ball be ' formed as big as an egg. These balls are scattered ' by a dead carcase on which the wolf has once preyed, and when he returns the next night, the first thing he ventures upon will be these balls of fat.' He also speaks of two species of wolves, one with a round balled foot, the other with a flat foot; and of a mongrel between the wolf and the fox, which the Indians used as dogs.

Red Fox (*canis alopec?*)

Grey Fox (*canis*——.)

Foxes are generally found in those woods which are not remote from houses. They are commonly taken in steel traps, but are sometimes dug out of their burrows. Formerly the head of a cod was used as a bait for the fox. It was laid in considerable quantities on the shady side of a fence, in a moon light night; and the gunner placed himself in ambush to shoot the fox at his approach. The silver grey and cross streaked fox skins, are accounted the most valuable, but the common red-fox skin is in much demand.

Wild Cat (*felix lynx*.) Of this species, the mountain cat is the largest; but the black cat has the most valuable skin. Some authors have pretended, that the wild cats of America, are a degenerate breed of the European cat imported hither. This opinion does not coincide with their own hypothesis, that the animals of the old world are dwindled in size, and less ferocious since their transportation to the new. It is certain, however, that neither of these opinions has any just foundation.

Skunk (*viverra pulorius*.) There is no stronger or more volatile odour in all nature, than the substance which this animal ejects when pursued or in danger. The 'diabolical scent,' as Buffon calls it, does not proceed from 'its urine,' but from a small bag which is attached to its skin, and comes off with it. The flesh is white and sweet, and is, by some people, relished as food. The fat is much esteemed as an ointment in pains and swellings of the joints. Goldsmith says, that this animal is 'often kept tame about the houses of the planters in America,' and in the next paragraph, that 'it steals into farm yards, and kills poultry.' The truth of this latter assertion is often experienced ; but no American is fond of such company. The skunk sometimes burrows under our barns, but is always an unwelcome intruder.

Otter (*mustela lutra* ?) Some of these have been tamed, and taught to catch fish for their owners.

Martin (*mustela* —.) This animal keeps itself remote from human habitations. Its skin is much valued, that of the darkest shade is preferred.

Weasel (*mustela martes* ?)

Ermine (*mustela erminea*.) This beautiful little animal is red, like a fox in summer, and white in winter. It is distinguished from the common weasel by the tip of its tail, which is always black. It is not common, but some of this species have been found in New-Hampshire.

Bear (*ursus arctos*.) Buffon speaks of two species of bears, the brown and the black, and he denies that the latter is carnivorous. The black bear only is known in this part of America, and he is one of the most noxious animals of our forest. In the months of August and September, he makes great havoc in the fields of Indian corn, in the new settlements. He places himself between two rows of

corn, and with his paws breaks down the stalks of four contiguous hills, bending them toward the centre of the space, that the ears may lie near to each other, and then devours them. Passing in this manner through a field, he destroys the corn in great quantities. To prevent this, the fields are sometimes guarded, by night; but this method is too tedious to be constant. Another is, to place a loaded gun, and stretch a line, connected with the trigger, across the field, so that the bear in his walk, by pressing against the line, may draw the trigger, and kill himself. This practice has sometimes been attended with success; but there is danger that people, who are not apprized of the design, may, in passing through a field, kill or wound themselves; and in fact this mode of setting guns, has, in some instances, proved fatal. Another way of taking the bear, is by setting log traps; but this is uncertain. A good dog is the safest defence, if he could be induced to remain by night in the field. In the autumn of some years, the bears come down into the old settlements, and they have been seen in the maritime towns; but now, their appearance in these places, is extremely rare. They are very fond of sweet apples, and will sometimes devour young swine, but very seldom attack mankind. An affecting instance of a child falling a prey to one of them, happened at Moultonborough, in the month of August, 1784. A boy of eight years old, son of a Mr. Leach, was sent to a pasture, toward the close of the day, to put out a horse, and bring home the cows. His father being in a neighbouring field, heard a cry of distress, and running to the fence, saw his child lying on the ground, and a bear standing by him. He seized a stake, and crept along, with a view to get between the bear and the child. The bear took the child by

the throat, and drew him into the bushes. The father pursued till he came up, and aiming a stroke at the bear, the stake broke in his hand ; and the bear, leaving his prey, turned upon the parent, who, in the anguish of his soul, was obliged to retreat, and call for help. Before any sufficient help could be obtained, the evening was so far advanced, that a search was impracticable. The night was passed by the family in the utmost distress. The neighbours assembled, and at break of day, renewed the pursuit. The child's hat, and the bridle, which he had dropped, were found, and they tracked his blood about forty rods, when they discovered the mangled corps. The throat was torn, and one thigh devoured. Whilst they were standing round the body, the bear rose from behind a log. Three guns were fired at the same instant, which dispatched him ; and a fire was immediately kindled, in which he was consumed. This was a male bear, of about three years old.

I have met with but one other instance of the same kind ; it happened in the year 1731, at a new plantation on Suncock river. A man being at work in a meadow, his son, of about eight years old, was sent to call him home to dinner. On their return, there being two paths through the woods, the son going first, took one, and the father the other. At dinner the child was missing, and after waiting some time, the father went to seek him, in the path which it was supposed he had taken. To his inexpressible surprise, a bear started up from among the bushes, with the bleeding corps between his teeth.

The Racoon (*ursus lotor*) lives in hollow trees, and sometimes feeds on corn in the fields. Its flesh is excellent food. Its fur is valued next to the beaver for hats. Buffon says that the racoon is found only in the southern countries of America. It is certain-

ly found in New-Hampshire, and in the eastern division of Massachusetts.

The Wolverine (*ursus luscus*) is a mischievous animal. He sits on the bough of a tree, near the paths of the deer and the moose, and jumps on their back, to which he clings by his claws till he has torn a hole in their neck and killed them. He enters the cabins of the Indians in their absence, and plunders them of eatables. Gyles, in his memoirs, tells a story of a wolverine, which, in one of these depredations, happened to throw a bag of gunpowder into the fire, by which means he lost his eyes, and became the sport of the Indians at their return.

The Woodchuck (*urfi vel mustelæ species*) is a small animal which burrows in the earth. It is generally fat to a proverb, and its flesh is palatable food.

Mole (*talpa europea*.)

Shrew Mouse (*forex cristatus*.) Ground Mouse (*forex murinus*.) Field Mouse (*forex araneus*.)

Porcupine (*hystrix dorsata*.) This animal is dangerous to dogs, for on seizing it they are tormented with its quills, which quills are of the size of pigeon's quills. The Indians dye them of various colours, and work them into various figures to adorn their belts, pouches, mockaseens, and birchen dishes.

Hare (*lepus timidus*?)

Rabbit (*lepus cuniculus*.)

The Beaver (*castor fiber*) is one of the most useful as well as sagacious animals of our wilderness. It is now become scarce in New-Hampshire, but the vestiges of its labours are very numerous.

The beaver is not only an amphibious animal, but is said to form a connecting link between quadrupeds and fishes. It delights in still water, of which it must have full and undisturbed possession. The depth of the water must be such as that it must have

sufficient room to swim under the ice. The male and female, with their young of one year old (called by the Indians *peoys*) form a family which consist generally of six. These inhabit one cell; but when come to the age of two years (*paylems*) they go off and build for themselves.

They sometimes choose a natural pond for the scene of their habitation and amusement; in which case they dig a hole in the earth, near the edge of the pond, and line it with sticks; to this they have a subterraneous passage from the water. Sometimes they reside on the coves or eddies of great rivers, where the water is still; but it is more usual for them to construct a dam, which by stopping the course of a stream, may overflow a piece of ground, and form a pond to their liking. In the choice of a spot for a dam, they have sagacity to judge whether it will confine and raise the water to answer their purpose. They take advantage of wind fallen trees, of long points of land, of small islands, rocks and shoals; and they vary the shape of their dam according to these circumstances, making it either circular, direct or angular; and the best human artist could neither mend its position or figure, nor add to its stability. It is constructed entirely of sticks and earth; the sticks are for the most part placed up and down the stream, seldom across, but always closely interwoven and cemented by mud, brought on their tails, which being broad and flat, answer the purpose of a trowel as their teeth do that of a saw. They have four incisive teeth, two in the forepart of the upper, and two of the under jaw, sharp and curved like a carpenter's gouge; with these they cut off trees and bushes of the softest wood, white maple, white birch, alder, poplar and willow; with these kinds of wood they construct their dams, and of these they always

have a sufficiency sunk under the water to serve them for food in the winter.

With respect to the size of the trees which they fell, and some other circumstances relative to their labours and habits, many marvellous stories have been published. La Hontan says they will cut off a tree 'as big as a hog's head.' Buffon, and after him Raynal and Goldsmith, speak of their 'sharpening stakes, and driving them into the ground.' Others have asserted things much more incredible.* The beaver is in reality a sagacious, laborious, and patient animal, and makes great use of his teeth in felling many small trees, and cutting them into pieces convenient for his use; but he has no instrument with which to *drive* them into the ground. The size of the trees which he generally chooses, is from one to ten inches in diameter; these are young trees, tender and sweet for food. Necessity sometimes obliges a number of them jointly to attack a tree of larger size. The largest of which I have any *certain* information is from fifteen to eighteen inches in diameter; but this is rare, and the felling of such a tree must require much labor, since those of but one inch have eight or ten strokes, distinctly marked, and a very good kerf is allowed.

Some accounts mention several hundred beavers assembling and holding a council previously to beginning a dam; but I am assured that a single family, and even a single beaver, when he has lost his partners, will go regularly to work either in building or repairing a dam as there may be occasion. I have myself taken sticks newly cut, from a dam, where a solitary beaver was at work. Josselyn tells of a beaver which was domesticated at Boston, and

* The most full and perfect account of the beaver which I have seen is in Hearne's journey to the Northern ocean, page 231, &c, where he detects and ridicules the many fictions and extravagant stories which have been related of these animals.

ran freely about the streets, retiring at night to the house of his owner.

The beaver's dam is from six to ten feet thick at the bottom, according to the breadth of the stream or the quantity of water. It slopes but little on the lower, and much on the upper side, and is from two to four feet wide at the top. It is always of such height as will confine a sufficiency of water for their purpose. After it is constructed, they place sods of wild grass upon it, so that in the course of a year it becomes swarded over like a portion of meadow. Those parts which are in the shoalest water, near the banks, are so consolidated, that after the middle of the dam is broken, these will remain like natural points of firm earth. On the top of the dam, in the middle, they always leave a sluice or passage of eighteen inches wide, and as many deep; and when the stream is large, they leave two or three, which the hunters call *sliding-places*. In these they divert themselves by sliding or swimming down the stream. It is not inconvenient for this animal to be long under water; nor is he wet when he leaves it to take the land; his coat is so well oiled that no water adheres to it.

When the dam is built, the house is begun. It is in the form of a hay cock, and of a size proportioned to the number of the family. The walls are two or three feet thick at the bottom, and are formed of the same materials as the dam. The door is not only under water, but below, where the water freezes. The lower story is about two feet high, and a floor of sticks, covered with mud, composes the second story. At the same distance a third story is formed, and then the roof is raised in an arched form. It is smooth on the inside, and above the water, always dry and clean. Through each floor there is a communication, and the upper floor is always

above the level of the water when at the highest. The outside of the house is rough but tight ; and if it ever decays, it is repaired. When the hunters find the houses out of repair, they conclude that the beavers have forsaken the pond.

In the winter it is necessary for them to keep one or more breathing holes in the ice constantly open, near the houses ; for which purpose they break the ice every night. It is confidently asserted by the hunters, that all their work is done by night, and that they are never seen in the day unless it be cloudy and dark. During the winter, they live on the wood which they have previously sunk under the water, and in the summer they are employed in repairing their houses and dams, or gathering their food in the neighbouring woods, to which they travel in narrow, beaten paths.

In these paths, or in the water where the path ends, or in the sliding places of the dam, the hunter sets his steel spring trap, which is previously scented with beaver's oil. Sometimes he raises a heap of mud, or peels little sticks, and having scented them, sets them up at the edge of the pond, placing the trap under water, near the mud or sticks. The trap is secured by a chain, or the beaver would draw it after him. He often escapes with the loss of a foot. Sometimes he is shot in the water, or on the land. When a beaver discovers an enemy, he strikes the water with his tail ; the noise alarms the whole family, and they are in a moment under water. The best fur is that which is taken in February and March ; in the summer, their fur is not good. The way of preserving the skins, is by salting and packing them in a close bundle, with the flesh sides together.

One valuable purpose which the beaver serves, is not mentioned, by any of the writers of natural his-

tory, which I have had opportunity to consult ; but I shall give it, in the words of a friend, to whom I am indebted for several communications respecting the original and cultivated state of the country.* ‘The
‘beavers, in building their dams, have no other design than that of making a habitation agreeable to
‘the natural bias, with which they are formed ; but,
‘I conceive, that Being, by whom the universe is so
‘wisely governed, has a farther design in this little
‘animal, who with unwearied labor builds a dam,
‘which stops the water from pursuing its natural
‘course, and makes it spread over a tract of land
‘from five to five hundred acres in extent ; and most
‘commonly the worst of land, a mere alder swamp
‘or bog, and the larger the tract, the more likely is
‘it to be the worse. By means of the waters continuing on this tract, more than half the year, for many
‘years together, every thing which grew upon it is
‘drowned ; all trees, bushes and shrubs are killed.
‘In a course of time, the leaves, bark, rotten wood
‘and other manure, which is washed down, by the
‘rains, from the adjacent high lands, to a great extent, spread over this pond, and subside to the bottom, making it smooth and level.

‘It is now that the hunter, ferreting the innocent
‘beaver, is also made subservient to the great design of Providence ; which is, by opening the dam,
‘and destroying the beaver, so that it is not repaired. Of consequence, the water is drained off, and
‘the whole tract, which before was the bottom of
‘a pond, is covered with wild grass, which grows
‘as high as a man’s shoulders, and very thick.
‘These meadows doubtless serve to feed great numbers of moose and deer, and are of still greater
‘use to new settlers, who find a mowing field al-

* MS. letter of Joseph Peirce, Esq.

‘ ready cleared to their hands ; and though the hay
‘ is not equally as good as English, yet it not only
‘ keeps their cattle alive, but in tolerable order ;
‘ and without these natural meadows, many settle-
‘ ments could not possibly have been made, at the
‘ time they were made. Such as are not fenced,
‘ afford the cattle good pastures in the beginning
‘ of the year, as the grass shoots very early. It is
‘ observed that those meadows which are mowed
‘ constantly, produce less at every mowing ; but
‘ will always hold out, where settlers are industri-
‘ ous, till they have cleared ground enough to raise
‘ English hay. I have more than two hundred
‘ acres in one body, made by several dams, across
‘ one brook, at various distances from each other.’

The Musquash (*castor zibethicus*) builds a cabin of sticks and mud in a shallow pond. He is not so shy of man as the beaver ; but is frequently found in the cultivated parts of the country. The oil-bag of the Musquash, wrapped in cotton, affords a perfume, grateful to those who are fond of musk.

The Mink (*mustela*) is an amphibious animal, and burrows in the earth by the side of rivers and ponds. Its fur is more valuable than the musquash.

The Ground Rat (*mustelresstris native.*)

The Black Rat (*mus* —) is a native, but it retires back into the country as the grey rat, which is imported in vessels from abroad, advances. The town of Hampton, though adjoining the sea, and one of the earliest settlements in New-Hampshire, had no grey rats till the year 1764, when an English mast ship was wrecked on the beach. This species of rat has advanced about thirty miles into the country, and farther, along the great roads. To prevent the entrance of this noxious animal into corn houses, the fills are laid on short posts, each of which is cap-

ped with a broad flat stone, over which the animal cannot pass.

Of Squirrels we have four species. The Black (*sciurus niger*) and the Grey (*sciurus cinereus*) though distinguished by Linnæus, differ here only in colour; the former is very rare, the latter very common. This is the largest species of Squirrels. It builds its nest in the crotch of a tree, generally a white oak, and there breeds and nourishes its young. It feeds on acorns and nuts, and lays up its winter food in the hollow parts of old trees.

The Red squirrel (*sciurus flavus* ?) is the next in size, and its habits are nearly the same.

The Striped squirrel (*sciurus striatus*) is smaller. It provides its winter food from the cornfields, and deposits it in holes in the earth, after having deprived each kernel of its germe, that it may not sprout.

The Flying squirrel (*sciurus volans*) is the least and most beautiful. Its fur is the most fine and delicate of any quadruped. It feeds on the buds and seeds of vegetables.

The Moose (*cervus tarandus* ?) is the largest animal of our forest. His palmated horns extend from four to six feet in breadth, and are from thirty to fifty pounds in weight. He has hair on his neck resembling the mane of a horse. His hoof is cloven, and when he trots, the clattering of it is heard at a great distance. His course through the woods is straight, to a proverb. He feeds on the wild grass of the meadows, or on the leaves and bark of a species of the *Cornel*, which is called moose-wood. When vexed by the flies in summer, he takes to the water, where he feeds on the wild oats or pond lilies. His flesh is of a coarser grain than beef, but sweet and tender. His lip, which is broad and cartilaginous, is accounted by the Indians and by our

own huntsmen a dainty, and his tongue is 'a dish for a sagamore.' The hide is thick and firm, and is made into soft and durable leather. When the Indians kill a moose or a deer, they cut off the hoof and draw out the sinews, of which they make the strongest cords.

The Deer (*cervus dama?*) was formerly found in very great plenty; but having been wantonly destroyed at improper seasons of the year, is now become scarce. The best time to hunt this animal for the facility of taking it, is in the winter, when there is a deep snow with a crust on its surface; but its skin is most valuable when killed in the warm months.

Hunting is an employment followed by some people, who prefer rambling, to a life of settled industry. The moose and the deer are tracked and pursued by dogs; or the huntsman lies in wait for them, at certain defiles, where they are known to pass, or near waters in which they bathe. The bear is sometimes unkennelled when retired to his den; or when ranging, if he take to a tree, he is a fair mark.

A new mode of driving away the wolf has been attempted with success. The town of Amherst was a few years ago much infested with this noxious intruder. On a day appointed, the inhabitants, by general consent took their arms, and surrounded a large swamp which they penetrated in every direction, as far as it was practicable; and kept up an incessant firing of guns and beating of drums through the day. In the following night the wolves quitted the swamp with a dismal howling, and have never since done any mischief in that town.

The only *mamillary biped* which we have is the Bat (*vespertilio murinus*) which forms the connecting link between the beasts and the birds.

Of Birds we have a great variety. The following catalogue is the most full, which has been collected, but cannot boast of perfection.

1. Bald Eagle,	<i>Falco leucocephalus.</i>
2. Brown Eagle,	<i>Falco fulvus.</i>
4. Large Brown Hawk,	<i>Falco hudsonius ?</i>
5. Hen Hawk,	<i>Falco sparverius ?</i>
3. Pigeon Hawk,	<i>Falco Subbutco,</i>
6. Fish Hawk,	<i>Falco Haliaetus ?</i>
1. Horned Owl,	<i>Strix Bubo.</i>
2. White Owl,	<i>Strix nyctea.</i>
3. Speckled Owl,	<i>Strix Aluco.</i>
4. Barn Owl,	<i>Strix passerina.</i>
Bird Hawk,	<i>Lanius canadensis.</i>
King Bird,	<i>Lanius tyrannus.</i>
Crow,	<i>Corvus Corax.</i>
Blue Jay,	<i>Corvus cristatus.</i>
Hang Bird,	<i>Oriolus Icterus.</i>
Red winged Black Bird,	<i>Oriolus phaniceus.</i>
Golden Robin or Gold Finch,	<i>Oriolus Baltimore ?</i>
Crow Black Bird,	<i>Gracula Quiscula.</i>
Cuckow,	<i>Cuculus americanus ?</i>
Great Red Crested Wood-Pecker,	<i>Picus pileatus ?</i>
Swallow Wood-Pecker,	<i>Picus hirundenaceus.</i>
Red Head Wood-Pecker,	<i>Picus erythrocephalus.</i>
White Back Wood-Pecker,	<i>Picus auratus.</i>
Carolina Wood-Pecker,	<i>Picus carolinus.</i>
Wooly Back Wood-Pecker,	<i>Picus pubescens.</i>
White Tail Wood-Pecker,	<i>Picus villosus ?</i>
Speckled Wood-Pecker,	<i>Picus maculolus*</i>
Nut Hatch,	<i>Sitta curestiae</i>
Kingfisher,	<i>Sitta canadensis.</i>
Creeper,	<i>Alcedo Alcyon.</i>
Humming Bird,	<i>Certhia pinus ?</i>
Swan.	<i>Trochilus colubris.</i>
	<i>Anas cygnus.</i>

The SWAN is the largest of the aquatic tribe which is seen in this country. One of them has been known to weigh 36 lb. and to be six feet in length from the bill to the feet, when stretched.†

* Since the printing of the note page 108, I find that the request of Dr. Cutler, respecting the new specific names, was, that they should be 'distinguished by a character different from the others.' It was at first thought that 'Italic capitals' would be as proper a distinction as any other; but this is found, on further inquiry, to be contrary to the practice of that class of authors. A smaller type is therefore used by way of distinction.

† This bird migrates to the Northward so early as to find no water but at the falls of rivers where there is no ice.

Naturalists have different opinions respecting the music of the swan. The tame swan of England is said to be silent; and Dr. Goldsmith seems to think the accounts of the music of the wild swan fabulous. What is deemed fabulous in Europe, is often realized in America. It is certain that our swan is heard to make a sound resembling that of a trumpet, both when in the water and on the wing. Mr. Hearne says that the swan at Hudson's Bay makes a noise resembling the sound of a French Horn. Page 436.

White Head Coot,
Brown Coot,
Black Duck Coot,
White Goose,
Bluish Goose,
Brant or Brent,
Wild or Black Goose,

Anas spectabilis,
Anas fusca.
Anas nigra.
Anas erythrophus.
Anas caerulescens.
Anas bernicla.
Anas canadensis.

This is the bird which Dr. HILL calls the *Swan Goose*. It is a bird of passage, and gregarious; the form of the phalanx, when on the wing, is that of a wedge. By the mixture of this with the common goose, a mongrel breed is produced, which is more valuable than either of them singly. The wild goose, though it migrates from one part of the continent to the other, yet has its local attachments. One of them, which was caught in the spring, and kept in a farm yard with a flock of domestic geese, when the time of its migration arrived, took the first opportunity to join a flock in their passage to the southward; but at the return of spring, came back and alighted in the same yard with four young ones, which she had produced in her absence.

The BRANT is rare in New-Hampshire; but in the bay of Massachusetts, is found in great abundance.

Sea Duck,	<i>Anas mollissima.</i>
Dipper,	<i>Anas albeola.</i>
Oldwife,	<i>Anas hyemalis.</i>
Red Head Quindar,	<i>Anas serina.</i>
Quindar,	<i>Anas bucephala.</i>
Whistler,	<i>Anas clangula ?</i>
Grey Duck,	<i>Anas Penelope.</i>
Widgeon,	<i>Anas Marila.</i>
River Coot or Ash colour Duck,	<i>Anas cinerea.</i>
Mallard or Sprig-tail Duck,	<i>Anas acuta.</i>
Lord and Lady,	<i>Anas histrionica ?</i>
Blue wing Teal,	<i>Anas discors ?</i>
Green wing Teal,	<i>Anas —.</i>
Crested wood Duck,	<i>Anas sponsa.</i>
Wood Duck,	<i>Anas arborca.</i>
Cream colour Shelldrake,	<i>Mergus Merganser ?</i>
Red belly Shelldrake,	<i>Mergus Serrator ?</i>
Pyed Shelldrake,	<i>Mergus Castor ?</i>
Murr,	<i>Alca Torda.</i>
Penguin,	<i>Alca impennis.</i>
Sea Parrot,	<i>Alca artica.</i>
Peterel or Mother Carey's } Chickens. }	<i>Procellaria pelagica.</i>
Pelican.	<i>Pelicanus onocrotalus occidentalis.</i>

The Pelican migrates from its native country, the Mississippi, far to the northward. It has been seen in New-Hampshire. The American Pelican is not a distinct species from the Pelican of Asia and Africa, but a variety only.

Shag,	<i>Pelecanus graculus ?</i>
Gannet,	<i>Pelecanus bassanus ?</i>
Brown Throat Loon,	<i>Colymbus Septentrionalis.</i>
Sea Loon,	<i>Colymbus Immer.</i>
White Gull,	<i>Larus candidus.</i>
Eagle Gull,	<i>Larus marinus.</i>
Mackerel Gull,	<i>Larus ridibundus.</i>
Tee-Arr, or Fishing Gull,	<i>Sterna minuta.</i>
Swallow tail Gull or Medrake,	<i>Sterna Hirundo ?</i>
Crane,	<i>Ardea canadensis.</i>
Stork,	<i>Ardea ciconia.</i>
Blue Heron,	<i>Ardea cœrulea.</i>
Skouk,	<i>Ardea virescens,</i>
White Heron,	<i>Ardea alba.</i>
Woodcock,	<i>Scolopax Rusticola,</i>
Wood Snipe,	<i>Scolopax fedoa.</i>
Grey Curlew,	<i>Scolopax totanus.</i>
Large Speckled Curlew,	<i>Scolopax lapponica.</i>
Humility,	<i>Tringa interpres ?</i>
Marsh Bird,	<i>Tringa morinella ?</i>

Rock Bird,
Beach-Bird,
Ox-Eye,
Kildee,
Black Breast Plover,
Upland Plover,
Large Spotted Plover,
Peep,
Wild Turkey,

Tringa maculata.
Tringa arenaria.
Charadrius alexandrinus ?
Charadrius vociferus ?
Charadrius africanus.
Charadrius tetradactylus.
Charadrius maculatus
Rallus carolinus.
Meleagris gallopavo.

Wild Turkeys were formerly very numerous. In winter they frequented the sea shore, for the sake of picking small fishes and marine insects, which the tide leaves on the flats. *Josselyn*, who resided eight years in the province of Maine, and wrote in 1672, says, that he had eaten part of one, which, when prepared for the spit, weighed thirty pounds; and *Wood*, who visited the country earlier, and wrote in 1639, speaks of some which weighed forty pounds. They are now retired to the inland mountainous country. Dr. *Goldsmith* doubts whether any of this breed have been tamed in America. They certainly have been tamed; but they are degenerated in size by their domestication, scarcely any being more than half so heavy as those above mentioned. The turkey is a rambling bird, and runs with great speed on the ground. The tame flocks frequently wander, and cannot be fattened till the snow prevents their excursions.

Growse,

Tetrao——.

The Growse is rarely seen, as there are no dry heaths in New-Hampshire, but on the tops of the largest mountains, which are seldom visited by man. This bird has a red head, is larger than the partridge, and its flesh, though red and dry, has a high flavour, and is very tender.

Quail,
Partridge,

Tetrao virginianus.
Tetrao marilandicus,

The Partridge is very common in our woods. Some of our epicurean gentry, have begun to fear, that its race will be too soon extinct ; but there is no danger. This bird is very prolific ; it is common to find twenty of its eggs in a nest ; and it has several coveys in a season. Quails are equally prolific. In the southern and middle States, the quail is called a partridge, and the partridge a pheasant. The true pheasant is not a native of our wilderness. The late Governor Wentworth brought several pairs of pheasants from England, and let them fly in his woods, at Wolfborough ; but they have not since been seen.

Wild Pigeon,

Columba carolinensis (dub.)

Wild Pigeons come in the spring, from the southward, in great flocks, and breed in our woods, during the summer months. They choose the thickest parts of the forest, for the situation of their nests. *Josselyn* says ‘ they join nest to nest, and tree to tree, ‘ by their nests, many miles together, on the pine ‘ trees.’ In the journal of *Richard Hazzen*, who surveyed the Province line, in 1741, there is this remark ; ‘ for three miles together, the pigeons’ nests ‘ were so thick, that five hundred might have been ‘ told on the beech trees at one time ; and could ‘ they have been counted on the hemlocks, as well, I ‘ doubt not but five thousand, at one turn round.’ This was on the western side of Connecticut river, and eastward of Deerfield river. Since the clearing of the woods, the number of pigeons is diminished.

Turtle Dove,
Sky Lark,
Marsh Lark,
Robin,
Thrush,
Thrasher or Mockbird,
Cherry Bird,
Crossbill,

Columba carolinensis.
Alauda alpestris.
Alauda magna.
Turdus migratorius.
Turdus rufus.
Turdus Orpheus ?
Ampelis Garrulus.
Loxia curvirostra ?

The Cross Bill is a bird rather larger than the sparrow ; it is common in the western and northern parts of the State. The upper and lower parts of its beak cross each other like a pair of shears, by which means it cuts off the stalks of wheat and rye, and then lays the side of its head to the ground to pick the kernels. The female is of a shaded olive colour. The male is of the same, but tinged with red.

Snow Bird,

Emberiza hyemalis ?

The Snow Bird is smaller than a sparrow, and appears in little flocks, in the winter, enlivening the gloom of that dreary season. They perch on the tops of the spires of dead grass, above the snow, or on spots of bare ground, or on the bushes and trees. They are seldom molested, as one of them is scarcely a mouthful ; but they have the same delicate taste as the quail. Besides the snow bird, the crow, the blue jay, the woodpecker and the partridge, have a degree of hardness, equal to the severity of our winters, and are then seen flying ; all others avoid it, by seeking a timely retreat.

Boblincoln,
Red Linnet,
Cheeweeh,
Yellow Bird,
Winter sparrow,
Chipping Bird,
Spring Bird,
Several species of Sparrows,
Crested Fly-Catcher,
Hedge Bird,
Cat Bird,
Brown Flycatcher,
Yellow Crown,
Grape Bird,
Blue Bird,
Crested Wren,
Common Wren,
Crested Titmouse,

Emberiza oryzivora.
Tanagra rubra.
Fringilla erythrophthalma ?
Fringilla tristis.
Fringilla grisea.
Fringilla ?
Fringilla.
Fringilla.
Muscicapa crinita.
Muscicapa canadensis.
Muscicapa carolinensis.
Muscicapa susca.
Muscicapa flava.
Motacilla icterocephala.
Motacilla Sialis.
Motacilla Regulus.
Motacilla Trochilus.
Parus bicolor.

Blue Titmouse,
 Tom Teet,
 Yellow Rumped Tom Teet,
 Little Hang-Bird,
 3 Bank Swallow,
 4 Black Martin,
 1 Barn Swallow;
 2 Small Martin,

Parus americanus.
Parus atricapillus.
Parus virginianus.
Parus pendulinus ?
Hirundo riparia.
Hirundo purpurea.
Hirundo rustica.
Hirundo urbria.

The Swallow appears in April, and disappears in August. It was formerly supposed to migrate, but the evidences of its retiring to the water, or marshy ground, and there remaining torpid, during the winter, are so many, that this opinion is now generally received.

Chimney-Swallow;
 Whip-poor-will,
 Night Hawk,

Hirundo pelagica.
Caprimulgus europæus. B
Caprimulgus americanus.

AMPHIBIOUS REPTILES.

Mud Turtle,
 Speckled Turtle,
 Toad,
 Pond Frog,
 Green Fountain Frog,
 Speckled Frog,
 Tree Frog;
 Bull Frog,
 Swift,
 Brown Lizard,

Testudo denticulata.
Testudo carolina ?
Rana Bufo ?
Rana ocellata.
Rana esculanta.
Rana maculata.
Rana arborea.
Rana boana.
Iacerta fuscata ?
Lacerta punctata.

AMPHIBIOUS SERPENTS.

Rattle Snake,

Crotalus horridus.

The Rattle Snake is the most venomous of all the serpent tribe, in this part of America ; but its motion is so slow, and the sound which it gives by rattling its tail, before it darts on its prey, is so distinguishable from the very few other noises which are heard in the woods, that it is easily avoided. The rattle snake of New-Hampshire is of a darker colour, and less variegated than that which is found about the blue hills, in Suffolk county, Massachusetts.

There are certain boundaries, beyond which, to the northward, none have been seen in New-Hampshire. These are on the western side of the country, Sugar river, a branch of the Connecticut, and Sawyer's river, a branch of the Saco. They have been very common about the shores, and on the islands of Winipiseogee lake; but as the country is settled, the number decreases: In the autumn they retire to their dens, in the cavities of rocks, which are open to the south; where they remain till the warmth of the summer sun invites them to bask in its beams. During their torpid state, some persons make a practice of drawing them from their dens, with hooks, and destroying them. In the hottest weather, they resort to meadows, and other watry places. Some years ago, in a dry summer, a number of people from Rochester, went to a meadow in the woods with an intention to mow it, but found it so full of rattle snakes, that they set fire to the grass and quit- ted the place. The following singular fact deserves to be remembered. A dog, belonging to a Mr. Wormwood, of Durham, being bitten by a rattle- snake, immediately went in search of a soft loamy spot of earth, in which he scratched a hole and bur- ied himself all over, excepting his head. Here he remained, refusing all nourishment, till the earth had extracted the venom. This fact was certified to me by John Smith, Esq. of Durham, lately de- ceased.

Small Brown Adder,
House Adder,
Water Adder,
Brown Snake,
Green Snake,
Black Snake, }
White Neck Black Snake, }
Striped Snake,

Coluber striatulus.
Coluber punctatus?
Coluber fasciatus.
Coluber Sipedon.
Coluber Saurita?
Coluber constrictor.
Anguis eryx?

AMPHIBIOUS FISHES.

Lamprey,
Sea Sucker,

Petromyzon fluviatilis ?
Petromyzon marinus.

The Lamprey frequents most of our rivers, especially where the passage is not interrupted by dams. In Merrimack, they ascend to the waters of Pemigewasset, and are found in plenty as far as Plymouth. That part which is below the air holes is salted and dried for food. After the spawning season is over, and the young fry have gone down to the sea, the old fish attach themselves to the roots and limbs of trees which have fallen or run into the water, and there perish. A mortification begins at the tail, and proceeds upward to the vital part. Fish of this kind have been found at Plymouth, in different stages of putrefaction.

Thornback,
Dog Fish,
Shark,
Monk Fish,
Sturgeon,
Lumpfish,

Raja Fullonica.
Squalus Acanthias.
Squalus stellaris ?
Lophius piscatorius.
Acipenser sturio.
Cyclopterus lumpus.

FISHES.

Eel,
Conger Eel,
Cat Fish,
Snake Fish,
Haddock,
Cod,

Muræna anguilla.
Muræna conger.
Anarrhichas lupus.
Ophidium imberbe.
Gadus aglesinus.
Gadus Morhua.

The Cod comes into the river Pascataqua, in the spring and fall, and is taken at sea, in all months of the year. The best are caught in the winter. The next in quality are taken in the spring and beginning of summer; the third kind in the latter end of summer and beginning of autumn.

Frost Fish,
Pollack,
Small Pollack,

Gadus luscus.
Gadus pollachius.
Gadus virens.

Hake,
Snake Fish,
Wolf Fish,

Gadus molva.
Blennius Grenellus.
Blennius anguillarius.

The Haddock, Hake and Pollack are taken at sea, in the spring and summer, and being dried, are sold under the denomination of scale fish.

Sculpion,
Bearded Sculpion,
Plaice,
Flounder,
Holibut,

Cottus quadricornis.
Cottus cataphractus ?
Pleuronectes platessa.
Pleuronectes flesus.
Pleuronectes Hippoglassus.

The Holibut is the largest fish which is taken for food. When full grown, it exceeds 500lb. in weight; those of 200lb. are frequently brought to market.

Dab,
Red Perch,
White Perch,
Whiting,
Sea Perch,
Bass,

Pleuronectes papillosus.
Perca fluviatilis.
Perca lucioferca ?
Perca alburnus.
Perca undulata ?
Perca ocellata.

The Bass was formerly taken in great plenty, in the river Pascataqua; but by the injudicious use of nets, in the winter, this fishery was almost destroyed. After the mischief was done, a law was made against it; but the bass have never since resorted to this river in any great numbers. It is said by some, that fish which are spawned in rivers, and descend to the sea, return to those rivers, only where they are spawned. If this principle be true, the breed might be renewed by bringing some of the bass, which are caught in Merrimack river, alive, over the land, to the nearest part of the waters of Pascataqua, a distance not more than twelve miles. This must be done before the spawning season, and might very easily be accomplished,

Shiner,
Chub,
Bream,
Stickle Back,
Skip Jack,
Mackrel,
Pout,
Salmon,

Perca nobilis ?
Perca philadelphica.
Perca chrysoptera ?
Gasterosteus aculeatus.
Gasterosteus Salatrix.
Scomber scomber.
Silurus Felis.
Salmo Salar ?

The SALMON formerly frequented the river Pascataqua ; but the numerous dams built across its branches, have obstructed the course of this valuable fish, and it has, for many years, totally forsaken the river. It still ascends the Saco, Merrimack and Connecticut ; in the two last, to their farthest head ; in the former, a projecting rock, in the great fall, near Sunday's rocks, forms an insurmountable obstruction ; but there is a free course for this fish up the branch called great Ossapy.

SALMON TROUT,

Salmo Trutta.

The Trout is found in all the streams which flow from the mountains, and very near their summits. The same is observed concerning this fish, in other countries. Sir W. Hamilton, describing the Appennines, in Italy, says ' the road follows the windings of the Garigliano, which is a beautiful clear trout stream, with a great variety of cascades and cataracts.* And Swinburne, in his account of the Pyrenees says 'trouts are often seen swimming down the stream ; but if disturbed, retire into the bowels of the mountain.† In some of the bays of Winipiseogee lake and river, very large trouts are taken with the hook. Those from six to ten pound, are common, and some have been caught of twenty lb. weight.

SMELT,
PICKEREL, OR PIKE,

Salmo eperlanus.
Esox lucius.

* Philos. transact. Vol. 67, anno. 1786, page 369.

† Travels through Spain, Vol. 2. page 311.

Atherine,
Herring,
Shad,

Atherina Menidia.
Clupea harengus.
Clupea alosa.

The SHAD ascend at the same time with the salmon, and are taken frequently in the same nets. The salmon fishery is so regulated by law, that three days only, in the week, are allowed to catch them.

Hard Head,
Alewife,
Bret,
Sucker,
Mcnow,

Clupea dura lævi mystax.
Clupea serrata.
Clupea minima.
Cyprinus Catostomus Forster.
Cyrinus.

There are many other fresh and salt water fishes, not sufficiently known to be arranged.

INSECTS.

Horned Beetle,
Carolina Beetle,
Dunghill Beetle,
Appie Beetle,
Golden Beetle,

Scarabæus simson.
Scarabæus carolinus.
Scarabæus stercorarius.
Scarabæus horticola ?
Scarabæus lanigerus.
Several new species, and others
that have not been arranged.

Stag Beetle,
Fluted Beetle,

Lucanus cervus.
Lucanus interruptus.
Dermestes lardarius.
Dermestes typographus.

Water Flea,
Fetid Beetle,
Lady Fly,

Gyrinus natator.
Silpha vespillo.
Coccinella 2—fuscalata.

Weevil,
Snouted Weevil,

Several species.
Chrysomela—many species.
Bruchus pisi.

Goat Chaffer,

Curculio quercus.
Many species.
Cerambyx coriarius.

Firefly,

Many species.
Lampyris lucida.

Skipper,

Several species.
Elater oculatus.

Glow-worm,

Many species.
Cicindela carolina.

Cantharides,

One or two other species.
Buprestis mariana.
Two or three other species.

Water Beetle,

Black Beetle,

Blossom Eater,

Cockroach,

Grasshopper, }

Cricket, }

Locust, }

Mole Cricket,

Froghopper, }

Balm Cricket, }

Large and small }

Water Fly, }

Boat Fly, }

Bug,

Louse, on cabbages,

Louse, on leaves of trees and }
plants,

Bug on plants and trees,

Butterfly,

Night Flutterer, }

Owl Moth, }

Moth, or Miller,

Apple Moth, or Canker Worm,

Dragon Fly, }

Adder Fly, }

Oak Apple Fly,

Saw Fly,

Wasp, }

Hornet, }

Bumble Bee, }

Wild Bee, }

Aunt,

Black Fly, }

Brown Fly, }

Horse Fly,

Mosquito,

Stinging Fly,

Snow Flea,

Father Long Legs,

Spider,

Dytiscus fuscus.

Dytiscus marginalis.

Dytiscus striatus.

Several other species.

Carabus americanus.

Numerous species.

Moleo nigra.

Staphylinus maxillosus.

Forficula.—Two species.

Blatta americana, (non indigenus.)

Grillus.—Numerous species.

Grillus gryllotalpa.

Cicada.—Many species.

Notonecta.—Several species.

Cinex.—Numerous species.

Aphis brassicae.

Aphis.—Numerous species.

Chermes.—Many species.

Papalico. } Numerous species,
and several non-de-
scripts.

Sphinx.

Many new species.

Phalena.—Numerous species.

Phalena wauaria?

Libellula.—Several species.

Hemerobius pectinicornis.

Several species.

Cynips.—Several species.

Tenthredo betulae.

Vespa.—Many species.

Apis.—Several species.

Formica.—Several species.

Musca.—Numerous species.

Tabanus.—Several species.

Culex pipiens.

Conops calcitrans.

Podura nivalis.

Phalangium.—Several species.

Aranea.—Many Species.

Crab,
Lobster,
Shrimp,
Hermit Crab,
Slender Crab,
King Crab, or Horse Shoe,

Cancer.—Many Species.

Monoculus polyphemus.
Monoculus piscinus.
Monoculus pulex.
Monoculus quadricornus.

VERMES.

Sea Clam,
Squid,

Sea lungs,
Star Fish, or Finger }
Fish,

Sea Egg,
Barnacle,
Hog Clam,
Razor Shell Clam,
Long Shell Clam,
Oyster,
Muscle,
Cockle,
Limpets,
Sand Shell Clam,
Sea Anemone,

Holothuria phantaphus.
Sepia media.
Sepia coligo.
Medusa pilearis.
Asterias Caput Medusa.—Three }
or four species. }
Echinus.—Several species.
Lepas anatifera.
Mya arenaria.
Solen ensis.
Solen radiatus.
Ostrea——.
Mytilus edulis.
Nerita littoralis ?
Patella fusca.
Sabella granulata.
Anemone marina locomotiva.

There is a tradition, grounded on a passage in Josselyn's voyage to New-England, and repeated by Gordon, in his geographical grammar, of a *scarlet muscle*, found in the river Pascataqua, in which is a vein, yielding a scarlet liquor, which affords an indelible stain to linen. Having made inquiry, I have not heard of this muscle, nor the place (Baker's cove) where it is said to have been found. Mr. PECK, who is curious in his inquiries into the natural history of the country, has assured me, that the 'sanies of many testaceous marine animals will give the same tint. There is a species of the buccinum, or white cockle, which is very commonly found on the shore, and not confined to any particular place, which being broken, and the sanies taken up with a hair pencil, will mark linen with

‘ a fine and durable crimson. The colour is observed to vary from its original yellow, to green, blue, purple, and crimson, which is its ultimate change.’

Vast beds of muscles appear in the river at low water, which are never used ; but might be taken out, and laid as manure on the adjacent lands.

Of the immense variety of insects, with which both the land and sea abound, it is impossible to give a particular description. There is an ample range for the curious naturalist, both on the sea shore, in the open land, and in the thick woods ; but if he engages earnestly in the pursuit, it may be advisable to defend himself, after the manner of the Indians, by smearing the exposed parts of his body with the oyl of the beaver.

The common Black Fly is not a native of the country, but was brought in ships from the West-Indies. The same may be said of the Cochroach, which has not yet quitted the maritime towns. The Bumble Bee is undoubtedly a native ; but it has been doubted whether the Honey Bee is, or is not. That several species of the honey bee were known in Mexico, before the Spanish invasion, appears from the tribute-rolls, and other historical paintings of that empire ; but it is probable that bees were first brought into these northern parts, from Europe. Josselyn is the only writer who mentions them, and this was his opinion, with which tradition concurs. They have multiplied exceedingly, and are frequently found in a wild state, enclosed in the trunks of hollow trees, in all parts of New-Hampshire as far northward as the State is inhabited, which is $44^{\circ} 40'$ of north latitude. They chiefly delight in the neighborhood of cultivation, as they derive their principal food from the labors of man.

The Caterpillars lay their eggs on the branches of apple trees, and, being hatched by the warmth of

the spring, they form clusters, and inclose themselves in a web, whence they issue forth in quest of food, and destroy the leaves of this and other trees ; but the most formidable enemy to the apple tree, is the canker worm. It comes out of the ground early in the spring, and ascends the tree in the shape of a white winged insect, where it deposits its eggs, which, being hatched by the genial warmth of the season, are converted into millions of black worms, about an inch in length. These strip the tree of its verdure, and, by the middle of June, it has the appearance of autumn. While engaged in this mischief, if the tree be struck or shaken, each worm descends to the ground by a thread, spun instantly from its bowels, and ascends, by the same rout, when the danger is over. By the 21st of June, they disappear ; the tree puts forth new leaves, but bears no fruit. The best way of guarding against them, is by putting a circle of warm tar round the trunk of the tree, and renewing it every day, during the time of their ascent ; this arrests and confines them, till they perish. They were not known in New-Hampshire till about twenty years past, and there are some parts which they have not yet reached. They do not appear every year, but there is no regular interval between their appearances, nor is the cause of the interruption known.

Beside these, there is another species, which comes but once in many years, and destroys the corn and grass, as well as leaves of trees. Their last appearance was in 1770. It was observed that they did not touch the leaves of elder. From observations of this kind, a hint was taken to make use of elder, and especially the dwarf elder, as a means of preserving the feeding leaves of young esculent vegetables, and even the branches of trees, from being destroyed by insects.

C H A P. XI.

Caverns, Stones, Fossils, and Minerals.

THIS chapter must be extremely imperfect, as many parts of the country are yet unexplored ; and of those which are known, the knowledge is mostly confined to the surface and its vegetation. Such things however as have occurred, shall be noticed.

Among the many rocky mountains and precipices, some openings appear, which are generally supposed to be the haunts of bears and rattle snakes ; and are rather objects of dread than of curiosity. A particular description of one of these caverns in the township of Chester, by Peter French, an ingenious young gentleman, deceased, shall be given in his own words.

‘ At about five miles distance from Chester meeting house, and very near the road leading to Concord, is an eminence called rattle snake hill. Its base is nearly circular, and about half a mile in diameter. It is very ragged, especially on the southern side ; where it is almost perpendicular ; and its summit frowns tremendous, about 400 feet high. In this side, at the height of ten yards, is an aperture in the rocks, of about five feet high, and twenty inches broad ; which is the entrance to what is called *the Devil’s den* ; concerning which, many frightful stories are told, to increase the terrors of the evening, among the children of the neighbouring villages ; and indeed I have observed the eyes of men assume a peculiar brightness, while recounting the imaginary dangers which they had there fortunately *escaped*.

‘ This entrance is about six feet long ; it then
‘ contracts its height to two feet and a half, and dis-
‘ plays its breadth horizontally on the right, fifteen
‘ feet ; where it is irregularly lost among the con-
‘ tiguous rocks. This form of the cavity continues
‘ about ten feet ; when it suddenly becomes about
‘ eight feet high, and three wide ; the sides nearly
‘ perpendicular, continuing thus about *nine feet*. In
‘ the midway of which, on the same plane, and near-
‘ ly at right angles on the left, is an aperture of five
‘ feet high and four wide, which continues ten or
‘ twelve feet, where it is lost irregularly among the
‘ rocks. Opposite to this, on the right, lies a spa-
‘ cious chamber, parallel to the said plane ; elevated
‘ about four feet, fifteen or twenty feet square, and
‘ about three feet high ; floored and ceiled by a reg-
‘ ular rock, from the upper part of which are de-
‘ pendent many excrescences, nearly in the form of a
‘ pear, some of which are more than an inch long ;
‘ but there is a much greater number of every pos-
‘ sible inferior size ; these are easily separable from
‘ the rock, and several of them are deposited in the
‘ museum at Cambridge, where they are shewn for
‘ petrified water. Their colour and consistence are
‘ those of a common stone ; but when approached
‘ in the cave with a flambeau, they throw about a
‘ sparkling lustre of almost every hue. This appear-
‘ ance is caused by a large drop of water, which
‘ hangs about the end of each ; and when the echo
‘ of its fall has reverberated round the vault, another
‘ begins to kindle in succession.

‘ At the end of the above mentioned *nine feet*, is
‘ a perpendicular descent of about four feet ; where
‘ the passage, becoming not more than eighteen in-
‘ ches wide, but at least fifteen feet high, and still
‘ nearly perpendicular, bends gently to the right, in
‘ an arch of a very large circle, for about thirty feet ;

‘ where eight or nine feet of the height falls into breadth, and all in seven or eight feet more is lost among the rocks, in inconsiderable chinks.

‘ The general direction of this cave is nearly north, and upon an ascent of about three degrees. The cavity is terminated by rocks, on all sides ; save that the above mentioned thirty feet has a gravelly bottom, at the farther end of which rises a small rivulet, strongly impregnated with sulphur. This rivulet increases imperceptibly in its descent, along the thirty feet ; when it falls suddenly into a transverse chink, about three inches wide, which receives it perpendicularly about ten feet ; when the little subterraneous cascade is intercepted by some thin lip of a rock, and thrown about in quite a merry strain, for such a solitary mansion.

‘ The rocks which wall this narrow passage, are cased with a shell of a reddish colour, about half an inch thick ; which is easily separable from the rock, in flakes as large as a man’s hand. These flakes emit a strong scent of sulphur, when thrown into the fire ; and this circumstance has given rise to a conjecture, that subterraneous fires have formerly raged here ; but whatever truth there may be in this opinion, the cave is now exceedingly cold, and a more gloomy situation is scarcely imaginable.’

In the town of Durham there is a rock, which is computed to weigh sixty or seventy tons. It lies so exactly poised on another rock, as to be easily moved by one finger. It is on the top of a hill, and its situation appears to be natural. Many other singular appearances among the rocks and mountains attract the attention of the curious, and serve as objects of amazement to the vulgar.

Of the different kinds of Earths and Clays, which

are found in New-Hampshire, it would be endless to give an account. The towns of Exeter, Newmarket, Durham and Dover, abound in clays. The same may be said of several towns on Connecticut river. In many of the new townships, clay does not appear till after the earth has been opened and cultivated. Marles, though found in great plenty in some places, are seldom used. Immense treasures of this precious manure will be reserved for future generations.

Red and yellow ochres are found in Sommerfworth, Chesterfield, Rindge and Jaffrey. It is observable that in several places, a stratum of yellow is found under one of red ochre, without any intervening substance. These have been purified and used with success in painting.

At Orford on Connecticut river, is found the Soap-Rock, (*Steatites*). It has the property of fuller's earth, in cleansing cloths. It is of a consistence between earth and stone. It may be sawn or cut with carpenter's tools, into any form whatever. To determine its capacity of enduring heat, I carefully measured and weighed a piece of it; and having kept it for one hour, in a glowing fire of coals, and cooled it gradually, I found its size was not in the least diminished. It lost a sixty-fifth part of its weight. It was evidently cracked, and was easily broken, by the hand. It was equally soft as before, and as capable of being cut or scraped. Its colour was changed from a light grey, to a micaceous yellow. The piece on which this experiment was made, weighed between seven and eight ounces.

In various parts of the country is found that transparent substance, which is commonly called Ising-Glass, (*Lapis specularis*.) It is a species of Talc; and is found adhering to rocks of white or yellow

quartz, and lying in *laminæ*, like sheets of paper. The most of it is white, some is yellow, and some has a purple hue. The largest leaves of this curious substance are found in a mountain, in the township of Grafton, about twenty miles eastward of Dartmouth college. It was first discovered in the following manner. A hunter took shelter for the night in a cavern of the mountain ; and in the morning found himself surrounded with this transparent substance ; a large leaf of which he fastened to the branch of a tree, near the cave, as a mark by which he might again find the place. This happened during the late war, when window-glass could not be imported. The scarcity of that convenient article brought the talc into repute. Many persons employed their time in blowing the rocks, separating the *laminæ*, cutting them into squares, and vending them about the country. This substance is particularly valuable for the windows of ships, as it is not brittle but elastic, and will stand the explosion of cannon. It is also used to cover miniature paintings, and to preserve minute objects for the microscope. The disadvantage of it for windows is, that it contracts dust, and is not easily cleaned ; but for lanterns, it is preferable to glass.

Crystal and Chrystalline Spars have been found at Northwood, Rindge and Conway. They are of various sizes, generally hexagonal, and terminating in a point. The largest which has fallen under my knowledge, was found at Conway. It was six inches in length, eight in circumference, and weighed thirty two ounces ; but it was not throughout pellucid.

Allum ore has been found at Barrington, Oxford and Jaffrey. Vitriol at Jaffrey, Brentwood and Rindge. It is generally combined in the same stone with Sulphur. Those stones which I have seen are

shelly, and the vitriol exudes at the fissures. I have one, which has been kept perfectly dry, for above twelve years ; and it produces the white efflorescence as plentifully as ever. It was taken from Lebanon, in the county of York ; where there is an immense quantity.

Free-stone has been discovered at Hanover and Piermont. At Orford are many Slate Rocks, and a grey stone, which may be wrought to great perfection, either for building or for Mill-Stones. It is said to be nearly equal to the imported burr stones ; and is in great demand.

Iron Ore is found in many places ; most commonly in swamps. It generally discovers itself by the colour and taste of the water, which runs through it ; and there are many springs in almost every part of the country which are impregnated in different degrees with it. Black Lead (*plumbago*) is found in large quantities about the grand Monadnock, in the township of Jaffrey. In the same neighborhood, some small specimens of Copper and Lead have been seen. There is also an appearance of copper in some rocks at Orford ; but no metal except iron has been wrought to any advantage.

Fossil Shells have been found near Lamprey river, in Newmarket, at the depth of seventeen feet ; and in such a situation as that the bed of the river could never have been there. The shells were of oysters, muscles and clams, intermixed. Clam shells have also been discovered at the depth of twenty feet, in the neighborhood of Dartmouth college.

Fossil Trees are sometimes found in the interval lands, adjoining the great rivers.

Mineralogy is a branch of science which is but little cultivated. Men of genius and science have not leisure to pursue objects from which present ad-

vantages cannot be drawn. The disappointments which have attended some expensive attempts ; the air of mystery thrown over the subject by ignorant pretenders ; and the facility with which every mineral may be imported from abroad, have discouraged inquiries. But from the specimens which have appeared, there can be no doubt of the existence of mineral and fossil treasures, in the search of which, future generations will find employment.

C H A P. XII.

Description of the harbour and river of Pascataqua.

THIS is the only seaport in New-Hampshire ; its latitude is $43^{\circ} 5' N.$ and its longitude $70^{\circ} 41' W.$ from the royal observatory at Greenwich. It is known to seamen by the following marks. Agamenticus, a remarkable mountain in the county of York, lies four leagues due north. Pigeon hill, on Cape Anne, bears due south, distant ten leagues ; and the highest of the Isles of shoals bears S. E. by S. distant three leagues from the entrance of the harbour.

In the middle of the harbour's mouth, lies Great-Island, on which the town of Newcastle is built. On the N. E. point of this island a light house was erected in 1771, at the expence of the province ; but it is now ceded to the United States. The directions for entering the harbour are these : 'Ships coming from the East, should keep in twelve fathoms, till the light bears N. half a point E. or W. distant three miles ; (to avoid a ledge of rocks which lies off the mouth of the harbour ;) then bear away for the light, keeping the western shore on board, and coming no nearer that shore than the depth of nine fathoms ; giving the light a proper birth, and standing over to the northern shore of the river ; where they may anchor in nine fathoms, abreast of Sparhawk's point. Ships coming from the southward, should observe the same directions, respecting the light, and keep in nine fathoms on the western shore.'

Between the north side of Great-Island and Kittery shore, is the main entrance, about a mile wide,

nine and ten fathoms deep. The anchorage is good; the shore is lined with rocks; the harbour is landlocked on all sides, and perfectly safe. The tides rise from ten to fourteen feet. The other entrance on the south side of Great-Island, is called Little Harbour; the water here is shoal, and the bottom sandy.

There are several islands in the river, between which and the shores are channels for small vessels and boats. Between the upper end of Great-Island, and the town of Portsmouth, on the southern side of the river, is a broad, deep, still water called *the Pool*; where the largest ships may lie very conveniently and securely. This was the usual station for the mast-ships, of which seven have been loading at one time. In this place the *Astræa* ship of war of twenty guns, was burnt, on a severely cold morning, January 17, 1744. She had been captured from the Spaniards at Porto Bello; and was taking in a load of naval stores, for the British fleet at Jamaica, when this accident happened.

The main channel lies between Peirce's island and Seavey's; on each of which, batteries of cannon were planted, and entrenchments formed in 1775. Here the stream is contracted to a very narrow passage, and the tide is extremely rapid; but the water is deep, with a bold rocky shore on each side. The rapidity of the current prevents the river from freezing in the severest winters.

The town of Portsmouth lies about two miles from the sea, on the south shore of the river. The number of dwelling houses at present is about 640, and of other buildings 620. The public buildings are three Congregational churches, one Episcopal, one Universalist, a State-house, a Market-house, four School-houses, and a Work-house. The town has convenient wharves, and the anchorage before it is

good. There is depth of water sufficient for the largest ships ; and there are such natural advantages, for all the purposes of building and docking them, and the harbour is so capable of defence, against any sudden attack by sea, that it might be made a very safe and commodious port for a navy.

Ships of war have been built here, both in former and latter times, viz. the Faulkland of 54 guns, in 1690 ; the Bedford-galley, of 32, in 1696 ; the America, of 40, in 1749 ; the Raleigh, of 32, in 1776 ; the Ranger, of 18, in 1777 ; and a ship of 74 guns, called the America, was launched the 5th of November, 1782, and presented to the King of France, by the Congress of the United States.

Three leagues from the mouth of the harbour lie the Isles of Shoals, which are seven in number. On Star-island the town of Gosport is built, which belongs to New-Hampshire. The dividing line runs between that and the next island to the northward, which belongs to Massachusetts. Here is a good road, with moorings ; and an artificial dock has been constructed with great labour and expense, by Mr. Haley, for fishing vessels. Ships sometimes take shelter here in bad weather, but it is not then safe for those of large bulk. These islands, being of solid rock, with but little earth, are incapable of any improvement by tillage, though they afford some pasturage and gardens. The inhabitants have formerly carried on the cod fishery to great advantage ; but it has been for some years declining. Saltworks have been erected on one of the islands, which have yielded salt of a superior quality, excellently adapted to the curing of fish.

The Pascataqua is the only large river whose whole course is in New-Hampshire. Its head is a pond in the N. E. corner of the town of Wakefield, and its general course thence, to the sea, is S. S. E.

about 40 miles. It divides New-Hampshire from York county, in Massachusetts, and is called Salmon-fall river, from its head, to the lower falls at Berwick ; where it assumes the name of Newichawannock, which it bears till it meets with Cochocho river, which comes from Dover, when both run together in one channel, to Hilton's point, where the western branch meets it. From this junction to the sea, the river is so rapid that it never freezes ; the distance is seven miles, and the course generally from S. to S. E. The western branch is formed by Swamscot river which comes from Exeter, Winnicot river which comes through Greenland, and Lamprey river which divides Newmarket from Durham ; these empty into a bay, four miles wide, called the Great Bay. The water in its further progress is contracted into a lesser bay, and then it receives Oyster river, which runs through Durham, and Back-river, which comes from Dover, and at length meets with the main stream at Hilton's point. The tide rises into all these bays and branches, as far as the lower falls in each river, and forms a most rapid current, especially at the season of the freshets, when the ebb continues about two-hours longer than the flood ; and were it not for the numerous eddies, formed by the indentings of the shore, the ferries would then be impassable.

At the lower falls in the several branches of the river, are landing places, whence lumber and other country produce is transported, and vessels or boats from below discharge their lading : So that in each river there is a convenient trading place, not more than twelve or fifteen miles distant from Portsmouth, with which there is constant communication by every tide. Thus the river, from its form, and the situation of its branches, is extremely favorable to the purposes of navigation and commerce.

At Dover is an high neck of land between the main branch of Pascataqua and Back river, about two miles long, and half a mile wide, rising gently along a fine road, and declining on each side like a ship's deck. It commands an extensive and variegated prospect of the rivers, bays, adjacent shores, and distant mountains. It has often been admired by travellers as an elegant situation for a city, and by military gentlemen for a fortress. The first settlers pitched here, but the trade has long since been removed to Cochecho-falls, about four miles farther up ; and this beautiful spot is almost deserted of inhabitants.

CHAP. XIII.

Trade, Navigation, Fishery and Manufactures.

THE first species of traffic which was known in this country was the fur trade, with the Indians ; the next object was fish ; and the third was lumber.

Formerly the banks of the river Pascataqua were covered with fine timber, which was cut or split into any form, and easily conveyed on board ships. The first settlers erected saw-mills, on the branches of the river ; and a great trade in lumber was driven for many years. When the neighbouring lands were cleared of the first growth, it was supposed that the lumber trade would decline ; but it was, and is still kept up by many of the people, and is drawn from the distance of thirty or forty miles, to the heads of the tide, in the branches of the river. It is then conveyed in rafts, or on board large gondolas, to the ships, in different parts of the river, or to the wharves at Portsmouth.

The mast trade was formerly confined to England ; all white pine trees of certain dimensions being deemed the King's property. The contractors and agents made large fortunes by this traffic ; but the labourers who spent their time in the woods, and were supplied with provision and clothing for themselves and their families, anticipated their earnings, and were generally kept in a state of poverty and dependance.

Ship building has always been a considerable branch of business. European traders often came hither to build ships, which they could do much cheaper than at home, by the profit made on the

goods, which they brought with them. Our own merchants also built ships of two and three hundred tons ; which were employed in voyages, to the British sugar islands, with a lading of lumber, fish, oil and live stock. The cargo was sold, and the produce of the island was sent hither in smaller vessels, for home consumption ; whilst the ships took a lading of sugars for England, where they were sold ; and with the freight a remittance (often unprofitable) was made to the merchants of England, for goods imported on credit the preceding year. Other vessels laden with timber and spars proceeded directly for the British ports, and were sold with their cargoes, for the same purpose. The coasting trade at the Southward, was an exchange of West-India commodities for corn, rice, flour, pork, and naval stores ; a part of which being re-exported to Newfoundland and Nova-Scotia, produced bills on England for remittance. This was the common routine of trade, before the late revolution ; by which the profit of our labor centered with the merchants of England.

The foreign trade, as distinguished from national, was very inconsiderable. Two or three vessels in a year would go to the free ports of the French and Dutch West-Indies with cargoes of lumber, fish oil and provisions, and bring home molasses to be distilled into rum, in the *only* distil-house in New-Hampshire. One vessel in a year would go to the Azores or the Canaries with pipe staves, fish, and other provisions, and return with a cargo of wine, the balance of which was paid in cash or bills, and sometimes a ship which had been to England, would get a freight to Lisbon or Cadiz, and return with salt and fruit. This was the sum total of our foreign commerce.*

* Port of Pascataqua.

*Foreign entries in the
following years.*
1764—112

*Foreign clearances in the
following years.*
1764—150

Since the revolution, the trade to the British West Indies has ceased ; but the French and Dutch ports in that quarter, are frequented by our lumber vessels ; though the restrictions laid upon certain articles of their produce, render the voyages thither less profitable.

For several years succeeding the late war, the partial imposts and impolitic restrictions of our own government, prevented foreign vessels from loading in our port, and a want of capital or of enterprise in the merchants of Pascataqua, has hitherto kept them from exploring the new sources of commerce which are opened to America by her independence, and which the merchants of other American ports are seeking with avidity. Since the operation of our general government, an equal system of impost has been introduced ; and trade is regulated so as to serve the general interest of the union. The officers of the customs are appointed by the Executive of the United States ; and the revenue arising from trade and navigation, is applied to national purposes.

That such an alteration was wise and salutary, may be evident from considering the situation of New-Hampshire, as well as of some other States in the union.

New-Hampshire is seated in the bosom of Massachusetts with a narrow strip of sea coast, and one

1765 — 115

1766 — 113

1767 — 112

1768 — 124

1769 — 128

1770 — 114

1771 — 104

1772 — 105

1773 — 92

1765 — 199

1766 — 136

1767 — 170

1768 — 183

1769 — 151

1770 — 142

1771 — 135

1772 — 136

1773 } — 88

9 months.

N. B. By *foreign* Entries and clearances, are meant all, except the coasting and fishing vessels.

From Eleazer Russell, Esq. Naval-Officer.

only port. Her inland country extends so widely as to cover a great part of the neighbouring States, and render a commercial connexion with them absolutely necessary. All the towns which are situate on the southern, and many of those on the western borders of New-Hampshire, find it more convenient to carry their produce to market, either at Newbury-port, Salem, Boston or Hartford. The towns on Saco and the northern parts of Connecticut river will necessarily communicate with the ports, in the eastern division of Massachusetts. The lumber which is cut on the upper part of the Merrimack, is rafted down that river, and is exported from Newbury-port; whilst that which is cut on Connecticut river is carried down to Hartford. The greater part of New-Hampshire is by nature cut off from any commercial intercourse with the only port in the State. Lumber, being a bulky article, must be transported to the most convenient landing. Waggon or sleys carrying pot and pearl ashes, pork, beef, butter, cheese, flax and other less bulky commodities, and droves of cattle, sheep and swine, will always be conveyed to those places where the vender can find the most advantageous market.

For these reasons it never was in the power of the government of New-Hampshire, either before or since the revolution, to reap the proper advantage, or even ascertain the value of its own productions. When the late Governor Wentworth was called upon by the British Ministry for an account of the 'Trade, nett produce and staple commodities,' of the then Province, he was obliged to make an exception of the articles 'carried out by land, it being impracticable to ascertain their value.' The same inconvenience was experienced during the continuance of our late partial imposts; and there could be no proper remedy for it, but the union of the

States under one general government, with respect to trade and revenue.

To attempt a particular detail of the number and value of articles of commerce produced in New-Hampshire, and exported from the various ports of Massachusetts and Connecticut, is impracticable. To confine the detail to the port of Pascataqua alone, gives but an imperfect idea of the produce of the whole State ; besides, a part of what is exported thence is produced in the adjoining county of York, which belongs to Massachusetts. Such accounts, however, as have been obtained from the custom-house, and from the merchants of Portsmouth, are exhibited at the end of this chapter.

The staple commodities of New-Hampshire may be reduced to the following articles, viz. ships, lumber, provisions, fish, horses, pot and pearl ashes, and flax-seed.

Ships are built in all the towns contiguous to the river Pascataqua, and its branches. They are generally set up on the banks of the river, but sometimes vessels of an hundreds tons and upwards, have been built at the distance of one or two miles from the water, and drawn on strong sledges of timber, on the snow, by teams of two hundred oxen, and placed on the ice of the rivers so as to float in the spring. They have also been built at the distance of seven or eight miles ; then taken to pieces, and conveyed in common team loads to the sea. Fishing schooners and whale-boats are often built at the distance of two or three miles from the water.

There are no workmen more capable of constructing good ships, than the carpenters of New-Hampshire. But the goodness of a ship ever did and will depend on the quality of the materials, the nature and promptitude of the pay, and the constant atten-

tion of the person whose interest it is that the ship should be good.

The number of ships built in the river in 1790, was eight. In 1791, twenty. The price of building is generally from eleven to twelve dollars per ton for the carpenters' work, and less than one third more for iron and other work.

The number of ships and other vessels belonging to the port of Pascataqua in 1791, is as follows :

Above 100 tons,	33
Under 100 tons,	50

83

The white pine of the forest is the strongest and most durable timber which America affords for masts. It is often advanced by Europeans, that the pines of Norway exceed those of America in strength. This is acknowledged to be true whilst the Norway wood retains its natural juices ; but these being soon exhausted by the heat and dryness of the air, leave the wood less firm, and a decay commences much sooner than in the white pine of America. The Norway pine begins to decay in five or six years ; but the American, with proper care to defend the mast head from moisture, will last unimpaired for twenty years.

The British navy for eighty years before the late war, received its masts wholly from America ; which is a proof that our pines are preferable to those of Norway. Several of the French ships of war which were much damaged, in the naval engagement of 1782, in the West-Indies, came hither for new masts ; and have had sufficient opportunity to try the strength of our wood. When proper persons are employed, and sufficient time is given to provide suitable materials, the forest of America can supply any demands which may be made of timber, either

for building, for naval stores or cabinet work. But a cargo prepared in an injudicious, hasty or fraudulent manner, may give a bad name to the American timber in foreign markets ; and prejudice whole nations against us.

Contracts for timber should always be made so as to give time to look for the requisite sticks, and cut them in the proper season of the year. If the trees were girdled and left to die standing, the timber would be much superior to any which is cut whilst alive. Trees cut in the sap should be stripped of their bark as soon as possible ; or they will be damaged by the worm. But after all the care and attention which can be bestowed on them, many trees which are intended for masts on the strict examination which they must pass, prove unfit for service, and sometimes the labour of a whole season is lost.

It is therefore accounted more profitable to get the smaller species of lumber, and especially those which do not interfere with husbandry ; which, after all, is much preferable to the lumber business, both in point of gain, contentment and morals.

Nothing is more convincing than fact and experiment. During the late war, the trade in lumber was suspended, and the people were *obliged* to attend to husbandry. They were then able to export large quantities of corn, though for several years before the war, it was imported for necessary consumption. The following statement obtained from the naval office, will place this matter in its just view.

Corn imported into the
river Pascataqua.

Bushels.

1765 ——— 6498

1769 ——— 4097

1770 ——— 16587

1772 ——— 4096

Corn exported from the
river Pascataqua.

Bushels.

1776 ——— 2510

1777 ——— 1915

1778 ——— 5306

1779 ——— 3097

		1780	—	6711
	4)31278	1781	—	5587
Average } p. ann. }	7819½			6)25126
	Average per ann.			4187⅔

To the above account of exports the following note is added by the naval officer. ‘It is likely *near half* as much has been smuggled out of the State and not accounted for.’* It must also be remembered that great quantities were carried out by land into the eastern countries of Massachusetts. If these be added to the list of exports, the average will come very little short of the average of corn imported before the war; and thus it is demonstrable that even those towns adjoining the river, in which lumbering was formerly the chief employment, and into which much corn was imported, are fully capable of raising, not only a sufficiency of provisions for their own support, but a surplus for exportation, equal to what they formerly imported, and paid for, in the hard, dangerous and unprofitable labour which always attends the getting of lumber.

At the close of the war the high price of lumber induced many people to resume their old employments; but there has been so much fluctuation in the demand for that article of late, that no dependence can be placed on it, and for this reason as well as others, husbandry is daily growing more into use. A careful inspection of provisions salted for exportation, would tend to establish the character of them in foreign ports, and greatly encourage the labours of the husbandman.

The cod fishery is carried on either by boats or schooners. The boats, in the winter season, go out

* The smuggled corn, during the war, went chiefly to Nova-Scotia; the country, which by Lord Sheffield’s calculation, was to supply the West-Indies with provisions.

in the morning and return at night, in the spring and summer they do not return till they are filled. The Schooners make three trips to the Banks in a season. The first, or spring fare, produces large thick fish, which after being properly salted and dried, is kept alternately above and under ground, till it becomes so mellow as to be denominated *dumb fish*. This fish, when boiled, is red, and is eaten generally on Saturdays, at the best tables in New-England.

The fish of the summer and fall fares is divided into two sorts, the one called merchantable, and the other Jamaica fish. These sorts are white, thin, and less firm. The Jamaica fish is the smallest, thinnest, and most broken. The former is exported to Europe, the latter to the West-India Islands.

The places where the cod fishery is chiefly attended to are the Isles of Shoals, Newcastle, Rye and Hampton ; but all the towns adjoining the river are more or less concerned in it. The boats employed in this fishery are of that light and swift kind called whale-boats. They are rowed either with two or four oars, and steered with another; and being equally sharp at each end, move with the utmost celerity on the surface of the ocean.

Schooners are generally from twenty to fifty tons, and carry six or seven men, and one or two boys. When they make a tolerable fare, they bring home five or six hundred quintals of fish, split, salted, and stowed in bulk. At their arrival, the fish is rinsed in salt water, and spread on hurdles, composed of brush, and raised on stakes, about three or four feet from the ground ; these are called flakes. Here the fish is dried in clear weather, and in foul weather it is put under cover. It ought never to be wet, from the time that it is first spread, till it is boiled for the table.

Besides the fleshy parts of the cod, its liver is preserved in casks, and boiled down to oyl, which is used by curriers of leather. The tongues and sounds are pickled in small kegs, and make a luxurious, viscid food. The heads are fat and juicy ; but most of those which are caught at sea are thrown away. Of those which are caught near home, the greater part become the food of swine.

The fishery has not of late years been prosecuted with the same spirit as formerly. Fifty or sixty years ago, the shores of the rivers, creeks and islands were covered with fish flakes ; and seven or eight ships were loaded annually for Spain and Portugal ; besides what was carried to the West-Indies. Afterward they found it more convenient to make the fish at Canseau ; which was nearer to the banks. It was continued there to great advantage till 1744, when it was broken up by the French war. After the peace it revived, but not in so great a degree as before. Fish was frequently cured in the summer on the eastern shores and islands, and in spring and fall, at home. Previously to the late revolution, the greater part of remittances to Europe was made by the fisheries ; but it has not yet recovered from the shock which it received by the war with Britain.

It is, however, in the power of the Americans to make more advantage of the cod fishery than any of the European nations. We can fit out vessels at less expense, and by reason of the westerly winds, which prevail on our coasts, in February and March, they can go to the banks earlier in the season, than the Europeans, and take the best fish. We can dry it in a clearer air, than the foggy shores of Newfoundland and Nova-Scotia. We can supply every necessary from among ourselves ; vessels, spars, sails, cordage, anchors, lines, hooks and provisions. Salt can be imported from abroad cheaper than it can be made

at home ; if it be not too much loaded with duties. Men can always be had to go on shares, which is by far the most profitable method, both to the employers and the fishermen. The fishing banks are an inexhaustible source of wealth ; and the fishing business is a most excellent nursery for seamen. It therefore deserves every encouragement and indulgence from an enlightened national legislature.

The manufacture of pot and pearl ashes affords a valuable article of exportation. In the new townships, where vast quantities of wood are burnt on the land, the ashes are collected and boiled, and the salts are conveyed to certain places, where works are erected, and the manufacture is perfected. This, like many other of our articles of exportation, has suffered much in its reputation, from an injudicious, or fraudulent survey. It is a lesson which ought to be deeply engraven on the minds of Legislators as well as Manufacturers and Merchants, that honesty at home is the only foundation for credit abroad.

An attempt has been made to manufacture sail cloth ; and the proprietor of the works, Thomas Odiorne, Esq. of Exeter, has received some small encouragement from the Legislature of the State. Such a bounty as is allowed in Massachusetts would give a spring to this business, and encourage the erection of other works of the same kind.

The manufacture of iron both in forges and furnaces might be rendered vastly more profitable than it is at present. This necessary metal instead of being imported might become an article of exportation.

Flaxseed is produced in large quantities. Some of it is manufactured into oil ; and some is exported.

The manufacture of leather and shoes is not so extensive as to produce articles of exportation ; but may be considered among the domestic manufactures.

In most of our country towns considerable quantities of tow-cloth are made, some of which is exported to the southern States, to clothe the Negroes, who labour on the plantations.

The manufacture of bricks and potter's ware may be extended to any degree. Several species of clay being found in great abundance, in the towns, at the heads of the several branches of the river Pascataqua ; in places which lie very convenient for water carriage. Bricks might be carried as ballast in every vessel which goes to ports where they are saleable. In this article, however, as well as many others, a regulation is needed ; most of the bricks which are made are deficient in size ; and much of the clay which is used in making them is not sufficiently mellowed by the frost of winter, or by the labour of the artificer.

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TABLE of Exportation from the port of Pascataqua, from October 1, 1789, to October, 1, 1791.

Articles exported		To Europe. W.Ind.N.Sco.Africa. Tot.				
1000	feet of Pine Boards	6247	11622	96	69	18034
Do.	feet of oak plank	378	26			404
Do.	staves and heading	1317	1608	44		2969
Do.	clapboards	2	19			21
Do.	shingles		2689			2689
Do.	hoops		791 $\frac{1}{2}$	7		861 $\frac{1}{2}$
	Feet of oar rafters	47000	950			47950
	Tons of pine timber	881 $\frac{1}{2}$	86			1741 $\frac{1}{2}$
Do.	oak timber	251	20			271
	Frames of houses		12			12
	Pine masts	41	4			45
	Spruce spars	13	72			85
	Shook hogshheads		2079			2079
	Waggon		2			2
	Pairs of cart wheels		14			14
	Sets of yokes and bows		28			28
	Boats		30			30
	Handspikes	80				80
	Quintals of dry Fish	250	26,207			26,457
	Barrels of pickled fish		501			501
Do.	Whale oil		120			120
Do.	Tar	1613	60			1673
	Casks of Flaxseed	1798				1798
	Barrels of beef		2775	2		2777
Do.	pork		9	1		10
Do.	rice				2	2
	Bushels of Indian corn		391		2000	2391
	Oxen and cows		577	33		610
	Horses		207	2		209
	Sheep		261	229		490
	Gallons of N. E. rum			150	1449	1599
Do.	Madeira wine		845			845
	Thousands of bricks		129			129
	Tons of pot ash	881 $\frac{1}{2}$				881 $\frac{1}{2}$
Do.	pearl ash	301 $\frac{1}{2}$				301 $\frac{1}{2}$
	Boxes of candles		28			28

Total value of exportation } 296,839 dollars 51 cents.
for two years

TABLE of Importation into the port of Pascataqua, from October 1, 1789, to October 1, 1791.

<i>Articles imported from</i>	<i>Europe.</i>	<i>W.Indies.</i>	<i>N. Scotia.</i>	<i>Total.</i>
Gallons of rum		138,911		138,911
Ditto Gin		22 $\frac{1}{2}$		22 $\frac{1}{2}$
Ditto Molasses		270,785		270,785
Ditto wine } from Madeira }				4721
Ditto Porter	457			457
lbs of unrefined sugar		546,648		546,648
Ditto loaf sugar			77	77
Ditto coffee		68,633		68,633
Ditto cotton		17,564		17,564
Ditto cocoa		27,944		27,944
Ditto cheese	1056			1056
Ditto tea	2696	86		2782
Ditto twine	2204			2204
Ditto nails	16890			16,890
Hundreds of cordage	17,1,7			17,1,7
Ditto hemp	940---			940--
Bushels of salt	(part)	(part)		98,336
Ditto sea coal	3131			3131
lbs of steel unwrought	16527			16,527
Ditto bar and sheet lead	4336			4336
Grindstones			(a few not ascertained)	

N. B. "What comes coast ways from any of the United States cannot be ascertained; as no regular entries are made where only the produce of the United States is on board; except accompanied with more than two hundred dollars value of foreign articles. The value of imported articles is generally governed by the Boston market."

PRICES CURRENT at Pascataqua, A. D. 1791.

Pine Masts hewn		Spruce and Pine Yards hewn in 8 square.		Pine Bowsprits hewn in 8 square.		
<i>inches</i>	<i>price</i>	<i>inches price.</i>		<i>inches</i>	<i>price</i>	
36	£ 147	PINE	24	£ 34	38	£ 64
35	117		23	27	37	56
34	96		22	23	36	48
33	75		21	20	35	44
32	60		20	16	34	42
31	47		19	12	33	32
30	38		18	9-10	32	31
29	30		17	8	31	27
28	25		16	6	30	21
27	20		15	1-10	29	16
26	17	SPRUCE	14	1- 8	28	9
25	14		13	1- 6	27	7
24	12		12	1- 4	26	6
23	10		11	1- 2	25	
22	9		10	1-	and all below at 3s p. inch.	
21	8		9	-18		
20	6					

and all below 20 at 6s per inch.

and all below 20 at 6s per inch.

TIMBER.		Oak ship timber measured } 1s per	
<i>Quality, dimensions and price.</i>		at the end of the arm. } <i>inch.</i>	
Oak from 15 to 50 feet in length		Ash timber per cord	
and from 10 to 20 inches square,		Lath wood per cord	
each forty cubic feet		24s	
Oak { white		24s	
red		BOARDS, PLANK AND JOIST.	
black		Each superficial square foot, one inch	
Maple		12s in thickness is called a foot.	
Beech		16s to 18s Pine per 1000 feet	
Black birch		20s Hemlock generally	
White pine		16s N. B. The price of these articles is	
		16s to 18s frequently varying.	
		12s to 13s Oak plank per ton	
		£ 8	

PRICES CURRENT. *Continued.*

Other species of LUMBER. <i>Quality, and price.</i>		ARTICLES AND PRICE.	
Clapboards per thousand	48s	Fish per quintal	<div> <div>Merch.</div> <div>Jamaica</div> <div>Scale</div> </div> <div> <div>18s</div> <div>13 to 14s</div> <div>10s</div> </div>
Shingles ditto	10s	Pork per barrel	£ 3 12s
Hoops ditto	£ 4	Beef ditto	£ 2 2s
White oak pipe staves per thousand	£ 9	Corn per bushel	3s
Ditto hogshead	£ 4	Rye ditto	3s6
Ditto barrel ditto	£ 2	Barley ditto	4s
Red oak hogshead ditto	£ 2	Flax seed ditto	3s to 4s
Ditto barrel ditto	£ 1 10s	Oxen, each	£ 4 10s
Anchor-stocks per inch at diameter of the nut	1s	Cows	£ 2 8s
Handspikes in the rough	1s	Horses	£ 6 to 30
Shook hhds { white oak	6s	Sheep	6s to 9s
{ red ditto	3s	Bricks per thousand	20s
Spruce spars per inch	4d	Cider per barrel	5s
Oar rafters per 1000 feet	£ 4	Seamen's wages per month	7 <i>dolls.</i>
		Chartering vessels per ton, per month	1 <i>dol.</i>

TABLE of ENTRIES at the port of Pascataqua from October 1, 1789, to October 1, 1791.

	Ships & Snows				Total of vessels.	American tonnage	French ditto	British ditto	Total of tonnage
		Brigantines	Schooners	Sloops					
France	1	3			4	732			732
French West Indies	12	42	13	5	72	9402	264		9666
St. Peter's and Miquelon			5		5	192	34		226
England	12	15			27	4119		570	4689
Scotland		4			4	464			464
Ireland	1	4			5	859			859
British West Indies	6	2	1	1	10			2005	2005
Nova Scotia		1	14		15			856	856
Portugal	1				1	293			293
Portuguese Islands	1	1	1		3	341			341
Holland and Plantations		15	9	1	25	2996			2996
Denmark and Islands			1	1	2	155			155
Africa									
Coasting & cod fishery			40	10	50	1166			1166
Total	34	87	84	18	223	20719	28	3431	24448

TABLE of CLEARANCES at the port of Pascataqua ; from October 1, 1789, to October 1, 1791.

	Ships and Snobs		Brigantines		Schooners		Sloops		Total of vessels	American tonnage	French ditto	British ditto	Portuguse ditto	Total of tonnage
France	17	70	39	10	136	16616	264							16880
French West Indies			8	1	9	428	34							462
St. Peter's and Miquelon	16	25	1		42	6725						441		7166
England		4			4	616								616
Scotland	1	2			4	666								666
Ireland	8	3	4	1	16							3134		3134
British West Indies			12		12							502		502
Nova Scotia														
Portugal	1				1								162	162
Portuguese Islands		2			2	233								233
Holland and Plantations														
Denmark and Islands														
Africa			1		1	110								110
Coasting and cod fishery			40	10	50	1166								1166
Total	43	107	105	22	277	26560	298	4077	162	31097				

[illegible]

TABLE of the VALUE of SILVER continued.

Scale of depreciation of one hundred dollars.

<i>years.</i>	<i>months equal to years.</i>	<i>months equal to years.</i>	<i>months equal to</i>	
1777	Jan. 100	1779	1781	Jan. 7500
	Feb. 104			Feb. 7509
	March 106			March 7500
	April 110			April 7500
	May 114			May 7500
	June 120			June 12000
	July 125			
	Aug. 150			
	Sept. 175			
	Oct. 275			
	Nov. 300			
	Dec. 310			
<hr/>				
1778	Jan. 325	1780	1781 to 1791	dol. value.
	Feb. 350			
	March 375			
	April 400			
	May 400			
	June 400			
	July 425			
	Aug. 450			
	Sept. 475			
	Oct. 500			
	Nov. 545			
	Dec. 634			
<hr/>				
	Jan. 2934			In American national currency, one dollar is equal to 100 cents.
	Feb. 3322			
	March 3736			
	April 4000			
	May 4800			
	June 5700			
	July 6000			
	Aug. 6300			
	Sept. 6500			
	Oct. 6700			
	Nov. 7000			
	Dec. 7300			

TABLE of the weight and value of GOLD and SILVER established by law 1785.

COINS	weight. value.							
	dwt.	gr.	£	s d		£	s	d
English or French } Crown			6	8	Gold per ounce	5	6	8
Spanish Dollar			6		Silver per ounce	6	8	
English Guinea	5	6	-1	8	Copper { 3 farthings of English coin }			
French ditto	5	6	-1	7 4				
Johannes	18		-4	16				
Half ditto	9		-2	8				
Moidore	6	18	-1	16				
Doubleloon	16	12	-4	8				
Pistole	4	3	-1	2				

Statement of the FISHERY at Pascataqua and its neighbourhood.

Schooners	27	} Employed in the Cod and Scale Fishery annually.
Boats	20	
Tonnage	630	
Seamen	250	

The Schooners, Boats, and Seamen belonging to the Isles of Shoals are not included in the above estimation.

Product of the Fishery in the year 1791.

Quintals made	}	Merchantable fish	5170
		Jamaica ditto	14217
		Scale ditto	6463

total, 25850

The fish made at the Isles of Shoals are included in this statement.

The success of the fishery in this season has been uncommonly good.

Estimate of seamen belonging to New-Hampshire in 1791.

In foreign trade	500
Coasting do.	50
Fishery	250

N. B. Some of the seamen who in summer are employed in the fishery, are in the winter employed in the coasting business, or in foreign voyages.

C H A P. XIV.

Effect of the climate and other causes on the human constitution. Remarks on population. Tables of Births, Deaths and Casualties.

IT has been confidently asserted by European writers, and by some of great reputation, that the climates of America, under similar latitudes to those of Europe, are unfriendly to health and longevity ; that the general period of human life is from forty-five to fifty ; and these pernicious effects are ascribed to putrid exhalations from stagnant waters ; to a surface uncleared, uncultivated, and loaded with rank vegetation, which prevents it from feeling the purifying influence of the sun.*

If such remarks were intended to be confined to the low plains in the southern States, the propriety of them might not perhaps be disputed ; but a distinction ought to be made between those parts of America and others in far different circumstances. If authors profess to write as philosophers they should seek for information from the purest sources, and not content themselves with theorising on subjects, which can be determined only by fact and observation ; or with forming general conclusions from partial reports. If they write as politicians, their aim may indeed be answered by stating facts in a delusive light ; and by representing America as a grave to Europeans, they may throw discouragement on emigration to this country. It is at the same time amusing to observe the inconsistent conclusions of these theorising philosophers ; for whilst one condemns the air of woodland as destructive to

* Robertson's History America, Vol. II. p. 17.

King's thoughts on Emigration to America, Political Magazine, 1799, p. 261.

life and health, another celebrates it as containing *nutritive* particles, and asserts that men who live in the woods consume less food than those who dwell in open countries.* But notwithstanding the dreams of European philosophers, or the interested views of European politicians, America can best be described by those who have for a long time resided in it. Those who have not seen it at all, and those who have passed through it with the rapidity of a traveller, can be very inadequate judges ; yet unhappily there are many of both these classes of writers whose accounts have gained more credit than they deserve.

In that part of America which it falls to my lot to describe, an 'uncleared and uncultivated soil,' is so far from being an object of dread, that there are no people more vigorous and robust than those who labour on new plantations ; nor in fact have any people better appetites for food. This is true not only of the natives of the country, but of emigrants from Europe. It has been a general observation that the first planters in new townships live to a great age. It is also true that the air of our forest is remarkably pure. The tall and luxuriant growth which an European might call 'rank vegetation,' not only indicates strength and fertility of soil ; but conduces to absorb noxious vapours ; and when the soil is once cleared, if man neglect his duty, nature, with her bountiful hand, produces a second growth of 'rank vegetation,' for the same benevolent purpose. A profusion of effluvia from the resinous trees impart to the air a balsamic quality which is extremely favourable to health, and the numerous streams of limpid water, some of which fall with great rapidity from the mountains, cause currents of fresh air which is in the highest degree salubrious, to those who reside on their banks. To these

* Abbe Raynal. History Indies. Vol. III. p. 278.

observations it may be added, that the northwest wind is the grand corrector of every noxious quality which can exist in the air of America ; and whilst that wind prevails, it diffuses health and imparts vigour to the human frame.

There are, indeed, some few situations, even in New-Hampshire, where vapour arising from land overflowed with fresh water, produces bilious and nervous diseases, and the inhabitants are subject to an early lassitude and debility ; which is often increased by an injudicious use of spiritous liquors for medical purposes ; but by the removal of such persons to the purer air of the mountains, and a change to a more temperate regimen, these complaints cease, and the constitution is reinvigorated.

There have also been some instances in the neighbourhood of Connecticut river, of swellings in the throat similar to the *goîtres* among the inhabitants of the Alps. Women have chiefly been affected in that way. A removal to the sea shore, and constant bathing with salt water have contributed to reduce these tumours. A free use of salted fish and vegetable acid, particularly cyder, has also been found beneficial, and by the best and latest information which I have been able to obtain, this disorder is now less frequent, and more easily controlled than it was a few years past.

From the tables of mortality which I have collected and which are here exhibited, it appears that a very large proportion of people live to old age, and that many of them die of no acute disease but by the gradual decay of nature. The death of adult persons between twenty and fifty years of age is very rare, when compared with the bills of mortality from European countries. It is computed that nearly one twentieth part of the inhabitants of London

perish, one year with another ;* it is certain that not more than one in seventy of the inhabitants of New-Hampshire dies in a year unless when some epidemic disorder prevails, which very seldom happens.

From the tables of casualties it also appears that the most mortal of the prevailing disorders of this country is the pulmonary consumption. This malady is universally allowed to be more frequent of late years than formerly. I cannot find that it is less common in the new, than in the old towns. It is certainly in some instances hereditary ; and it is believed by many to be contagious. Fevers of several kinds are much less malignant than formerly. The chronic rheumatism is very common, but seldom proves mortal. It is often caused by the changes from heat to cold, to which people who labour and travel in all weathers, are exposed.

Patients from the Southern States and the West India islands with bilious complaints and intermittent fevers, soon recover their health on their arrival to our shores. A regular intermittent, or what is commonly called the fever and ague is extremely rare, unless it be contracted in some other climate.

It is thought by some that the exhalations from salt marshes are injurious to health. This may be the case where the air is prevented from circulating freely, by the vicinity of high ridges of land ; but the town of Hampton, which is almost uniformly level, though it contains a very extensive marsh, is as healthy and as favourable to longevity as any town in the State, as may be evident from an inspection of the tables of mortality for that place.

The natives of foreign countries who remove to this part of America, generally live to a great age ; if they do not impair their constitutions by spiritu-

* Rush's Medical Observations, page 47.

ous liquors. There are, indeed, some veteran fots, natives of this as well as other countries ; who render themselves burdensome to society, and contemptible in their advanced age. The purity of our air, and plenty of food, are doubtless the causes of their surviving such frequent draughts of liquid poison.

Attempts have been made at several times to ascertain the number of people in New-Hampshire. The late Governor Wentworth was ordered by the British ministry to take an exact survey ; but 'having no fund to pay the expense, and no law to 'compel obedience' to the order, he was subjected to the inconvenience of delay and disappointment. The number of the people however, in 1767, was estimated at 52,700. Another estimate was made in 1774, of which I have met with no official account ; but have been informed that it was 85,000. This was too high. The estimate given to Congress by the delegates of New-Hampshire, at the commencement of the revolution, was still more extravagant. A survey taken in 1775, partly by enumeration and partly by estimation, for the purpose of establishing an adequate representation of the people, made the whole number 82,200.

I have taken much pains to collect from the several towns the numbers lost by means of the late war. By accounts received from twenty-seven towns in different parts of the State, the number lost amounts to 377. These twenty-seven towns, according to the survey in 1775, contained 22,749 inhabitants. If a comparison be made, by the rule of proportion, between these and the other towns in the State ; the number lost out of the whole, will amount to 1362 ; and if a farther allowance be made for the maritime towns, the number may fairly be estimated at 1400. As these were mostly men in the prime and vigour of life, we ought to

take into the account not only the simple loss of so many lives, but a decrease of population, equal to the increase which probably would have been made, had they lived to this time. If we reckon this increase in the proportion of three to one, it will produce the sum of 4200, which, added to the original number, will make 5600. But allowing the 600 for casualties, we may moderately compute 5000 persons, less than the number would have been, had the last fifteen years been all years of peace.

The census taken by order of Congress in 1790, is the most correct account which has ever been made. The whole amount is 142,018. If this be compared with the number in 1775, and the difference divided, by the number of intervening years, without any reference to the loss sustained by the war; the average of increase will be 3987 per annum, for the last fifteen years. If the number in 1775 be compared with the number in 1767, and the difference divided by the number of intervening years, the average per annum, for those eight years, will be 3687. If a mean between these two, viz. 3883, be taken for the increasing ratio per annum, since the year 1767, it will produce a number very nearly corresponding with the number taken by the census in 1790. If this mode of computation be just, the number of people in New-Hampshire has actually doubled in less than nineteen years, notwithstanding that seven of those nineteen were years of war.

This may more clearly appear from the following table; in which the first column contains the years; the second column shews the number in each year, by the ratio of 3883; and the third the numbers by the ratio of 3687 for the first eight years, and 3987 for the last fifteen.

TABLE OF POPULATION.

1767	52700	52700	} <i>increasing by 3687.</i>
68	56583	56387	
69	60466	60074	
1770	64349	63761	
71	68232	67448	
72	72115	71135	
73	75998	74822	
74	79881	78509	
75	78364	82196	
76	87647	86183	
77	91530	90170	} <i>increasing by 3987.</i>
78	95413	94157	
79	99296	98144	
1780	103179	102131	
81	107062	106118	
82	110945	110105	
83	114828	114092	
84	118711	118079	
85	122594	122066	
86	126477	126053	
87	130360	130040	
88	134243	134027	
89	138126	138014	
1790	142009	142001	

In both columns, the half of the number taken by the census, viz, 71,009, falls between the years 1771 and 1772; a period short of nineteen years, from 1790.

This rapid increase of population, is partly natural and partly adventitious. The distinction between these two causes is evident; but to ascertain the precise limits of their respective operations, is impracticable, without a more minute survey than has ever yet been taken. Large emigrations have been made since the peace of 1763, from the neighbouring States, into the new townships of New-Hamp-

TABLE of BAPTISMS and DEATHS in Hampton, continued.

Years.	Deaths.	Baptisms.		Ages.		
		Male.	Female.	under 2 years.	between 2 and 5	26
1777	9	14	9			7
78	11	10	11			6
79	11	18	5			4
1780	9	11	3			7
81	7	16	8			2
82	6	17	4			6
83	14	14	16			4
84	9	12	10			8
85	12	7	8			16
86	11	9	8			10
				90	100	3
	99	128	92			
		Adults 2				
					Deaths	99
					Baptisms	228

				under 2 years		9
				between 2 and 5		1
1787	13	13	11			2
88	12	10	15			—
89	13	8	9			7
90	5	10	12			1
91	3	9	5			2
to October				40	50	—
31.	46	50	52	50	60	3
				60	70	8
				70	80	11
				80	90	2
				90	100	
					Death	46
					Baptisms	102

TABLE OF CASUALTIES IN HAMPTON.

<i>Casualties.</i>	1735	1745	1755
	<i>to</i>	<i>to</i>	<i>to</i>
	1744	1754	1763
Accident	6	4	1
Apoplexy		2	2
Asthma			1
Cancer	3	2	4
Childbed	12	5	1
Cholic	2	3	3
Consumption	15	26	21
Convulsions	8	15	11
Dropsy		3	2
Dysentery	1	4	7
Fevers	16	30	41
Jaundice	1		1
King's evil			2
* Long sickness	5	2	1
Mania		2	1
Measles		3	
Mortification		1	2
Old age	12	12	9
Palsy	2	9	8
Pleurisy	2	1	2
Quinsy	1	1	2
Rheumatism	1		
Small pox			4
Sore mouth	1	3	3
Strangury	2	3	2
Suddenly	7	2	11
Throat Distemper	91	60	30
† Unknown	28	28	13
Whooping cough			2
Total	216	221	187

* The term *long sickness* is peculiar. It probably means the same with *Consumption*.

† In the class *unknown* are included the nameless disorders of young children, and the still-born.

TABLE OF CASUALTIES IN HAMPTON, *Continued.*

<i>Casualties.</i>	1767	1777	1787
	<i>to</i>	<i>to</i>	<i>to</i>
	1776	1786	1791
Accident	7	1	2
Asthma		1	
Bleeding		1	
Cancer	2		1
Childbed	1		3
Cholic	1		
Consumption	27	21	9
Convulsions	5	13	2
Dropsy	1	5	
Dysentery	9	2	3
Fevers	12	9	3
Gravel		1	1
Jaundice	2	3	
Lethargy			1
Measles	1		
Mortification	4	4	2
Nervous head ache			1
Old age	14	6	7
Palsy	6	7	3
Quinsy	1	1	
Rheumatism		1	
Schirrus		1	
Small pox	1		
Scrophula		2	
Sore mouth		1	
Suddenly	3	3	6
Throat distemper	3	7	
Violence		1	
Whooping cough	2	3	
Worms	6	2	1
Unknown	7	3	1
	115	99	46

TABLE of BAPTISMS and DEATHS in *Newmarket*, collected from
the Records of the Rev. JOHN MOODY, by WENTWORTH
CHESWILL, Esq.

<i>Years.</i>	<i>Deaths.</i>	<i>Baptisms.</i>	<i>Ages.</i>			
1731	7	30	under	5		37
32	9	14	between	5	and 10	7
33	1	21		10	20	3
34	1	18		20	30	1
35	18	20		30	40	1
36	11	31		40	50	2
37	7	22		50	60	1
38	4	19		60	70	5
39	4	28		70	80	2
1740	1	22		80	90	1
				90	100	
	63	225		above 100		1
				age unknown		2
						63
1741	9	29				
42	9	44	under	5		63
43	33	44	between	5	and 10	17
44	11	26		10	20	7
45	3	23		20	30	4
46	11	22		30	40	5
47	4	26		40	50	5
48	8	17		50	60	5
49	14	28		60	70	2
1750	12	24		70	80	2
				80	90	
				90	100	
	114	283		age unknown		4
						114
1751	25	27	under	5		98
52	47	36	between	5	and 10	32
53	32	17		10	20	21
54	21	25		20	30	19
55	19	24		30	40	11
56	13	26		40	50	8
57	18	29		50	60	16
58	24	24		60	70	16
59	21	20		70	80	5
1760	19	20		80	90	7
				90	100	1
	239	246		age unknown		5
						239

TABLE of BAPTISMS and DEATHS in Newmarket, *Continued.*

<i>Years.</i>	<i>Deaths.</i>	<i>Baptisms.</i>	<i>Ages.</i>		
1761	23	24	under	5	53
62	8	25	between	5 and 10	5
63	8	28		10 20	6
64	13	24		20 30	12
65	12	16		30 40	5
66	25	19		40 50	8
67	18	16		50 60	7
68	8	7		60 70	13
69	9	13		70 80	17
1770	14	12		80 90	8
				90 100	
	138	194		age unknown	4

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TABLE of DEATHS in *Dover*—by JEREMY BELKNAP.

<i>Years.</i>	<i>No. of Deaths.</i>	<i>Ages.</i>		<i>No.</i>
1767	9	under	2 years.	46
68	17	between	2 and 5	9
69	19		5 10	14
1770	16		10 20	6
71	23		20 30	10
72	17		30 40	15
73	15		40 50	13
74	10		50 60	6
75	12		60 70	22
76	47		70 80	28
			80 90	13
	185		90 100	2
abroad in } the war }	8	above	100	1
				185
	193			

1777	29	under	2 years	47
78	16	between	2 and 5	20
79	9		5 10	7
1780	20		10 20	12
81	8		20 30	14
82	22		30 40	9
83	23		40 50	14
84	24		50 60	13
85	33		60 70	15
86	8		70 80	20
to Sept.			80 90	18
	192		90 100	3
abroad in } the war }	21			
				192
	231			

Of unmarried females between 15 and 25 years of age, *eight* died in 20 years.

Of married females of the same age, *four*.

Still-born children are not reckoned in this table.

No account of Births could be obtained, many of the inhabitants being Quakers ; and of the others, many did not bring their children to Baptism.

TABLE OF CASUALTIES IN DOVER.

<i>Casualties.</i>	1767	1777
	<i>to</i>	<i>to</i>
	1776	1786
Accidents	11	10
Apoplexy	1	3
Ashma	3	
Bleeding	2	
Cancer	1	1
Childbed	7	3
Cholic	3	1
Cough and fever	5	
Whooping Cough	1	10
Consumption	26	34
Convulsions	5	3
Decay of nature	19	16
Dropsy	6	14
Drunkenness	1	
Dysentery	2	17
Felones de se		2
Fevers	25	17
Gravel	1	
Jaundice	4	3
Iliac passion		1
King's evil	2	
Mania	1	2
Measles	1	
Children in the month	20	17
Mortification		5
Nervous head ache	3	1
Palsy	5	6
Quinsy	1	7
Rickets		2
Rheumatism	1	
Strangury	3	
Suddenly	4	2
Throat Distemper	1	11
Thrush	1	
* Worms	19	4
	185	192

* In the class of worms are included the nameless diseases of children.

TABLE of DEATHS in *East-Kingston*, collected from the records of
the REV. PETER COFFIN, by the REV. ISAAC MANSFIELD.

<i>Years.</i>	<i>No. of Deaths.</i>	<i>Ages.</i>		<i>No.</i>
1740	4	under 1	year	19
41	5	between 1	and 3	20
42	6	3	5	8
43	8	5	10	6
44	21	10	20	8
45	6	20	30	7
46	18	30	40	3
47	6	40	50	5
48	14	50	60	8
49	6			
				94
	94			
1750	5	under 1	year	25
51	6	between 1	and 3	14
52	6	3	5	8
53	13	5	10	6
54	13	10	20	10
55	20	20	30	5
56	12	30	40	5
57	7	40	50	13
58	11	50	60	4
59	6	60	70	2
		70	80	6
	99	80	90	1
				99
1760	14	under 1	year	20
61	8	between 1	and 3	10
62	2	3	5	
63	3	5	10	5
64	10	10	20	6
65	6	20	30	14
66	5	30	40	11
67	4	40	50	4
68	6	50	60	4
69	4	60	70	7
1770	15	70	80	5
71	13	80	90	4
				90
	90			

TABLE of BIRTHS and DEATHS in *Wilton*, by the Reverend ABEL FISKE.

<i>Years.</i>	<i>Deaths.</i>	<i>Births.</i>	<i>Excess of births.</i>
1784	11	47	36
85	7	49	42
86	6	38	32
87	11	49	38
88	14	29	15
89	2	37	35
90	20	32	12
	71	281	210

Progress of POPULATION in *Wilton*. TABLE of DEATHS in *Exeter*, by the Rev. ISAAC MANSFIELD.

<i>Years.</i>	<i>Numbers.</i>	<i>Years.</i>	<i>Deaths.</i>
1739	2 families.	1784	22
1755	70 persons.	85	27
1763	240	86	26
1775	623	87	31
1786	1013	88	20
1790	1105		126

TABLE of DEATHS and CASUALTIES in *Conway*, by the Rev. NATHANIEL PORTER.*From Oct. 1778, to Oct. 1790.*

under 9 years, chiefly Throat distemper,	37
Fevers	3
Mortification,	2
Dropsy	2
Asthma	1
Suddenly	2
Decay of nature <i>Æt.</i> 90	1
Consumption <i>Æt.</i> 48	1
Canker	2
Felo de se	1
Accidents,	3
Total	55

under 1 year	18
between 1 and 3	9
3 5	5
5 10	5
10 20	9
20 30	17
30 40	10
40 50	10
50 60	6
60 70	11
70 80	12
80 90	12
90 100	2
Total	126

TABLE of CASUALTIES in Exeter, by the Rev. ISAAC MANSFIELD.

<i>Casualties.</i>	<i>No.</i>	<i>Casualties.</i>	<i>No.</i>
Accident	6	Fever mixed	2
Apoplexy	1	———pulmonic	2
Asthma	2	———putrid	1
Cancer	4	Gravel	1
Childbed	5	Mortification	1
Choiera morbus	1	Palsy	5
Complication of disorders	1	Quincy	3
Consumption	39	Scarlet fever	4
Convulsions	4	Schirrus	1
Decay of Nature	12	Scrophula	1
Diarrhæa	1	Throat distemper	6
Dropsy	5	Whooping cough	3
Epilepsy	1	Unknown	7
Fever-nervous	7		
		Total	126

Remarkable instances of Longevity.

In Dover, Howard Henderson died in 1772, aged upwards of 100 years. In the former part of his life he was a seaman, and served on board the fleet of Sir Cloudesly Shovel, at the taking of Gibraltar from the Spaniards in 1704.

In Durham, John Buss, a preacher of the gospel for 33 years, but not ordained, also a practitioner of physic, died in 1736, at the age of 108. He was remarkably active and vigorous at a very advanced age.

The family of Col. James Davis, whose name is mentioned in the preceding History, (vol. 1, pages 274, 332, 347) was remarkable for longevity as well as superior stature.

The father died in 1749, aged 88

His children	{	James	93
		Thomas	88
		Samuel 1788	99
		Daniel	65
		Sarah	91
		Hannah	77
		Elizabeth	79
		Ephraim 1791,	87
		Phebe \AA t. 85, and the widow of Samuel \AA t. 102, are yet living.	

In Londonderry, the first planters lived, on an average, to 80 years ; some to 90, and others to 100. Among the last was William Scoby, who died in 1754, at the age of 110. The two last heads of the sixteen families who began the planting of that town, died there in 1782, aged about 93 years each. They were women.

In Chester, James Wilson died in 1739, aged 100 years.

James Shirley in 1754, aged 105.

Another person of the same name, aged 91, was living in 1790.

William Craigie and his wife died in 1775, each aged 100.

In Newmarket, William Perkins died in 1732, aged 116. He was born in the West of England. Governor Burnet visited him at Newmarket, and examined him respecting many facts and occurrences during the civil wars in England in the last century. His son died in 1757, aged 87. Several of his grand children have lived above 70 years.

In Barrington, fourteen of the first planters were living in 1785, who were between 80 and 90 years of age. The settlement began in 1732.

In Atkinson, Ebenezer Belknap died at the age of 95, and his wife at the age of 107.

In Wakefield, Robert Macklin, a native of Scotland, died in 1787, at the age of 115. He lived several years in Portsmouth, and followed the occupation of a Baker. He frequently walked from Portsmouth to Boston, 66 miles, in one day, and returned in another. This journey he performed, the last time, at the age of 80.

In Salem, (a town adjoining the southern boundary) Abiel Asten, one of Lovewell's brave company, who behaved gallantly at the battle of Pigwacket, in 1725, was living in 1790, aged 86.

The two eldest ministers of the gospel now living, are the Rev. James Pike of Somersworth, aged 88, and the Rev. Ebenezer Flagg of Chester, aged 87.

CHAP. XV.

Political Character, Genius, Manners, Employments and Diversions of the People.

IT is much less difficult and dangerous to describe the character of the dead than the living ; but in so great a variety as the inhabitants of a whole State, there cannot but be some general traits which all must allow to be just ; and which, however disagreeable, if applied particularly, yet will not be disrelished by any, when delivered only in general terms. It is not my wish to exaggerate either the virtues or defects of my countrymen ; but as an American, I have a right to speak the truth, concerning them, if my language be within the limits of decency.

The genius and character of a community are in some measure influenced by their government and political connexions. Before the Revolution, the people of the different parts of New-Hampshire, had but little connexion with each other. They might have been divided into three classes. Those of the old towns, and the emigrants from them. Those on the southern border, most of whom were emigrants from Massachusetts ; and those on Connecticut river, who came chiefly from Connecticut.

Of the first class the people might be subdivided into those who, having been trained in subjection to Crown Officers, were expectants of favours from government, and ready to promote the views of the aristocracy ; and those who, from principle or habit, were in opposition to those views. A long and intimate connexion with Massachusetts, both in peace and war, kept alive a democratic principle ; which,

though it met with the frowns of men in office, yet when excited to action, could not be controled by their authority. The people of the second class were naturally attached to Massachusetts, whence they originated, and where they were connected in trade. Some towns had suffered by the interference of grants made by both governments and by controversies concerning the line, which gave birth to law suits, carried on with great acrimony and expense for many years. Those of the third class brought with them an affection and respect for the colony whence they emigrated, and where the democratic principal had always prevailed. They entertained an inferior idea of the people in the maritime parts of the State ; whilst these in return looked with an envious eye on those emigrants to whom were *sold* the lands which had been promised to be *given* to them as a reward for the exertions and sufferings of their parents and themselves in defending the country against its enemies.

Another source of disunion was the unequal representation of the people in the General Assembly. As late as the year 1773, of one hundred and forty-seven towns, forty-six only were represented, by thirty-four members ; and several towns were classed, two or three together, for the choice of one. The towns of Nottingham and Concord, though full of people, and of above forty years standing had not once been admitted to the privilege of representation ; and this was the case with many other towns ; which, though not of so long settlement, yet contained more inhabitants than some others, which had always enjoyed the privilege. No uniform system of representation had been adopted. None could be established by law, because it was claimed by the Governor as part of the royal prerogative to call Representatives from new towns ; and this preroga-

tive was exercised without any regard to the rights, the petitions, or the sentiments of the people.

Before the year 1771 the Province was not divided into counties ; but every cause from even the most remote parts was brought to Portsmouth, where the courts were held and the public offices were filled by a few men, most of whom were either members of the Council, or devoted to the interest of the Governor, or personally related to him. In the administration of justice, frequent complaints were made of partiality. Parties were sometimes heard out of court, and the practice of *watering the jury* was familiarly known to those persons who had much business in the Law. The dernier resort was to a court of appeals, consisting of the Governor and Council ; of whom seven were a quorum and four a majority. Here the final sentence was often passed by the same persons who had been concerned in the former decisions ; unless the cause were of such value as to admit of an appeal to the King in Council. During the administration of the last Governor, some of these sources of disaffection were removed ; but others remained, for an experiment, whether a cure could be effected, by a change of government.

The Revolution which called the democratic power into action, has repressed the aristocratic spirit. The honors and emoluments of office are more generally diffused ; the people enjoy more equal privileges, and, after long dissention, are better united. Government is a *science*, and requires education and information, as well as judgment and prudence. Indeed there are some who have struggled through all the disadvantages arising from the want of early education, and by force of native genius and industry, have acquired those qualifications which have ena-

bled them to render eminent service to the community ; and there are others who have been favoured with early education, and have improved their opportunity to good purpose. Notwithstanding which, the deficiency of persons qualified for the various departments in Government, has been much regretted, and by none, more than by those few, who know how public business ought to be conducted. This deficiency is daily decreasing ; the means of knowledge are extending ; prejudices are wearing away, and the political character of the people is manifestly improving.

But however late the inhabitants of New-Hampshire may be, in political improvement ; yet they have long possessed other valuable qualities which have rendered them an important branch of the American union. Firmness of nerve, patience in fatigue, intrepidity in danger and alertness in action, are to be numbered among their native and essential characteristics.

Men who are concerned in travelling, hunting, cutting timber, making roads and other employments in the forest, are inured to hardships. They frequently lie out in the woods several days or weeks together in all seasons of the year. A hut composed of poles and bark, suffices them for shelter ; and on the open side of it, a large fire secures them from the severity of the weather. Wrapt in a blanket with their feet next the fire, they pass the longest and coldest nights, and awake vigorous for labour the succeeding day. Their food, when thus employed, is salted pork or beef, with potatoes and bread of Indian corn ; and their best drink is water mixed with ginger ; though many of them are fond of distilled spirits, which, however, are less noxious in such a situation than at home. Those who

begin a new settlement, live at first in a style not less simple. They erect a square building of poles, notched at the ends to keep them fast together. The crevices are plaistered with clay or the stiffest earth which can be had, mixed with moss or straw. The roof is either bark or split boards. The chimney a pile of stones; within which a fire is made on the ground, and a hole is left in the roof for the smoke to pass out. Another hole is made in the side of the house for a window, which is occasionally closed with a wooden shutter. In winter, a constant fire is kept, by night as well as by day; and in summer it is necessary to have a continual smoke on account of the musketos and other insects with which the woods abound. The same defence is used for the cattle; smokes of leaves and brush are made in the pastures where they feed by day, and in the pens where they are folded by night. Ovens are built at a small distance from the houses, of the best stones which can be found, cemented and plaistered with clay or stiff earth. Many of these first essays in housekeeping, are to be met with in the new plantations, which serve to lodge whole families, till their industry can furnish them with materials, for a more regular and comfortable house; and till their land is so well cleared as that a proper situation for it can be chosen. By these methods of living, the people are familiarised to hardships; their children are early used to coarse food and hard lodging; and to be without shoes in all seasons of the year is scarcely accounted a want. By such hard fare, and the labour which accompanies it, many young men have raised up families, and in a few years have acquired property sufficient to render themselves independent freeholders; and they feel all the pride

and importance which arise from a consciousness of having well earned their estates.

They have also been accustomed to hear their parents relate the dangers and hardships, the scenes of blood and desolation through which they and their ancestors have passed ; and they have an ambition to emulate their hardy virtues. New-Hampshire may therefore be considered as a nursery of stern heroism ; producing men of firmness and valor ; who can traverse mountains and deserts, encounter hardships, and face an enemy without terror. Their martial spirit needs only opportunity to draw it into action ; and when properly trained to regular military duty, and commanded by officers in whom they can place confidence, they form a militia fully equal to the defence of their country.

They are also very dextrous in the use of edge tools, and in applying mechanical powers to the elevation and removal of heavy bodies. In the management of cattle they are excelled by none. Most of their labor is performed by the help of oxen ; horses are seldom employed in the team ; but are used chiefly in the saddle, or in the winter season, in sleighs.

Land being easily obtained, and labour of every kind being familiar, there is great encouragement to population. A good husbandman, with the savings of a few years, can purchase new land enough to give his elder sons a settlement, and assist them in clearing a lot and building a hut ; after which they soon learn to support themselves. The homestead is generally given to the youngest son, who provides for his parents, when age or infirmity incapacitates them for labour. An unmarried man of thirty years old is rarely to be found in our country towns. The women are grandmothers at forty,

and it is not uncommon for a mother and daughter to have each a child at the breast, at the same time ; nor for a father, son and grandson, to be at work together in the same field. Thus population and cultivation proceed together, and a vigorous race of inhabitants grows up, on a soil, which labor vies with nature to render productive.

Those persons, who attend chiefly to husbandry, are the most thriving and substantial. Those who make the getting of lumber their principal business, generally work hard for little profit. This kind of employment interferes too much with husbandry. The best season for sawing logs is the spring, when the rivers are high ; this is also the time for ploughing and planting. He who works in the saw-mill at that time, must buy his bread and clothing, and the hay for his cattle, with his lumber ; and he generally anticipates the profit of his labor. Long credit is a disadvantage to him ; and the too free indulgence of spiritous liquor, to which this class of people are much addicted, hurts their health, their morals and their interest. They are always in debt, and frequently at law. Their families are ill provided with necessaries, and their children are without education or morals. When a man makes husbandry his principal employment, and attends to lumber only at seasons of leisure ; and can afford to keep it for a market, and be his own factor, then it becomes profitable. The profits of the other generally goes into the hands of the trader, who supplies him with necessaries at an advanced price, and keeps him in a state of dependance.

Where husbandry is the employment of the men, domestic manufactures are carried on by the women. They spin and weave their own flax and wool ; and their families are clad in cloth of their

own making. The people of Londonderry, and the towns which are made up of emigrants from it, attend largely to the manufacture of linen cloth and thread, and make great quantities for sale. These people are industrious, frugal and hospitable. The men are sanguine and robust. The women are of lively dispositions, and the native white and red complexion of Ireland is not lost in New-Hampshire. 'The town is much indebted to them for its wealth and consequence.'*

The people of New-Hampshire, in general, are industrious, and allow themselves very little time for diversion. One who indulges himself in idleness and play, is stigmatised according to his demerit. At military musters, at Judicial Courts, at the raising of houses, at the launching of ships, and at the ordination of Ministers, which are seasons of public concourse, the young people amuse themselves with dancing. In some towns they have a practice, at Christmases of shooting geese for wagers; and on many other occasions, the diversion of firing at marks is very common, and has an excellent effect in forming young men to a dexterous use of arms. The time of gathering the Indian corn is always a season of festivity. The ears are gathered and brought home by day; and in the evening a company of neighbours join in husking them, and conclude their labour with a supper and a dance. In the capital towns they have regular assemblies for dancing; and sometimes theatrical entertainments have been given by the young gentlemen and ladies. In Portsmouth, there is as much elegance and politeness of manners, as in any of the capital towns of New-England. It is often visited

* MS. letter of the Rev. William Morrison of Londonderry.

by strangers, who always meet with a friendly and hospitable reception.

The free indulgence of spiritous liquors, has been, and is now, one of the greatest faults of many of the people of New-Hampshire; especially in the neighbourhood of the river Pascataqua, and its branches, and wherever the business of getting lumber forms the principal employment of the people. If the reader is curious to form an estimate of the quantity of distilled spirits consumed in the State, he may satisfy himself, partly by inspecting the Table of importation; partly by inquiring the number of barrels of rum manufactured at the only distil house in the State; partly by considering the quantity transported by land from the different seaports of Massachusetts, and partly by knowing *'the allowance'* which is usually given to labouring people in the neighbourhood of the river Pascataqua; and which is obstinately persisted in, notwithstanding the remonstrances and endeavours of some worthy characters to abolish it.

In travelling up the country it affords pleasure to observe the various articles of produce and manufacture coming to market; but in travelling down the country, it is equally disgusting to meet the same teams returning, loaded with casks of rum, along with fish, salt, and other necessary articles.

Before the Revolution it was customary to give drams at funerals, and in some towns to repeat the baneful dose two or three times. During the war, a scarcity of materials gave opportunity to put a check on this pernicious practice. It is now less common in most places, and in some it is wholly disused.

Among husbandmen, cyder is their common drink. Malt liquor is not so frequent as its whole-

fomeness deserves ; and as the facility with which barley and hops may be raised, seems to require. In some of the new towns a liquor is made of spruce twigs, boiled in maple sap, which is extremely pleasant. But after all, there are no persons more robust and healthy, than those, whose only or principal drink is the simple element, with which nature has universally and bountifully supplied this happy land.

C H A P. XVI.

Constitution, Laws, Revenue, and Militia.

THE form of government, established in 1784, is founded on these two grand principles, viz. 1. That 'the people have the sole and exclusive right of governing themselves, as a free, sovereign and independent State; exercising and enjoying every power, jurisdiction and right pertaining thereto, which is not, or may not hereafter be by them expressly delegated to the United States of America, in Congress assembled.' And 2. That 'the three essential powers of government, the legislative, executive and judicial ought to be kept as separate from, and independent of each other, as the nature of a free government will admit; or as is consistent with that chain of connexion which binds the whole fabric.'

The rights of the people are particularly declared in thirty-eight articles prefixed to the form of government. The objects of this declaration are personal freedom, the security of property, and the peace and order of human society.

By this constitution, the *legislative* power is vested in a GENERAL COURT, consisting of a Senate and house of Representatives, each of which has a negative upon the other. The SENATE consists of twelve persons chosen by the several counties in the following proportions; five for Rockingham; two for Strafford; two for Hillsborough; two for Cheshire; and one for Grafton. But the General Court may divide the State into different districts, and assign the number of Senators, in proportion to the public taxes, paid by each district. The Senate, therefore,

may be considered as representing the *property* of the State.

The qualifications of a Senator are these. He must be thirty years of age ; he must have been resident in the State for seven years ; and at the time of his election, must be an inhabitant of the district for which he is chosen ; he must possess in his own right, a freehold of two hundred pounds value, within the State, and he must be of the protestant religion.

The number of the house of REPRESENTATIVES is not limited ; but the principles on which it is professedly regulated, are *population* and *equality*. Every town containing 150 rateable poles of twenty-one years of age, may elect one representative. Every town containing 450 may choose two ; the mean increasing number for every representative being 300. This proportion is said to be ‘as equal as circumstances will admit.’ Towns which have less than 150 polls, are generally classed for the choice of a representative.

The qualifications of a representative are two years’ habitancy ; an estate of £100, one half of which is a freehold in the town he represents ; actual residence within the same, and a profession of the protestant religion.

Money bills originate in the house of Representatives ; but may be amended by the Senate. Impeachments are made by the house, and tried by the Senate. The Journals of both houses are printed ; and upon the motion of any one member, the yeas and nays on any question are taken and entered on the journals.

The *executive* power is vested in a PRESIDENT and COUNCIL. The PRESIDENT is annually elected by the people in the same town-meetings where the Senators and Representatives are chosen ; but if

there be not a majority in favour of one person, the election is made by the General Court. The Representatives nominate two out of the persons who have the highest number of votes, of which two, the Senate by ballot, elect one to be President for the year.

The qualifications of the President are these. He must have been an inhabitant of the State for seven years next preceding his election ; he must be thirty years of age ; he must have an estate of £500 value, one half of which is a freehold within the State, and he must profess the protestant religion.

The President of the State is also President of the Senate ; having an equal vote in legislation with any other member, and a casting vote in case of an equal division.

The COUNCIL consists of five persons, of whom two are chosen out of the Senate and three out of the Representatives, by the joint ballot of both houses. Their qualifications are the same as those of Senators.

Representatives to CONGRESS are chosen by the inhabitants in town meetings, and the votes of each town are returned to the Secretary's office and laid before the General Court. Those who have a majority of the votes are declared duly elected ; but if there be a deficiency, the General Court make a list of such persons as have the highest number of votes, equal to double the number wanting ; this list is sent to the towns, and out of it they make the choice. The votes then are returned as before ; and the person or persons who have the highest number are elected. If there be an equality it is decided by the Secretary, who draws one of the two names.

In case of a vacancy, in the representation of the State in Congress, the votes are taken in the same manner, and returned to the President and Council.

By the constitution of the United States, the number of Representatives to Congress is three. But according to the late census and the determination of Congress that one Representative shall be chosen for every 30,000 inhabitants, the State at the next election will be entitled to four.

The number of ELECTORS for the President and Vice-President of the United States is five ; who are chosen in the same manner as the Representatives to Congress. The two SENATORS in Congress are chosen by the General Court.

The Secretary, Treasurer and Commissary General of the State, are chosen by the General Court. County Treasurers and Recorders of deeds, by the people in town meetings ; the votes are returned to the Courts of Sessions, and the person who has the highest number of votes is declared elected ; but in case of an equality, the Justices present determine the choice. Clerks of courts are appointed by the Justices, and no clerk can be of council to the parties.

The oath of fidelity to the State is as follows :

‘ I, A B, do truly and sincerely acknowledge, profess, testify and declare, that the State of New-Hampshire is and of right ought to be a free, sovereign and independent State ; and do swear that I will bear faith and true allegiance to the same ; and that I will endeavour to defend it against all treacherous conspiracies and hostile attempts whatever. And I do further testify and declare that no man or body of men hath or can have a right to absolve me from the obligation of this oath, declaration or affirmation ; and that I do make this acknowledgement, profession, testimony and declaration, honestly and truly, according to the common acceptance of the foregoing words, with-

‘out any equivocation, mental evasion, or secret reservation whatever. So help me GOD.’

The enacting style is ‘By the Senate and House of Representatives in General Court assembled.’ All indictments and informations conclude ‘against the peace and dignity of the State.’

The seal of the State is, a field encompassed with laurels; on the field, a ship on the stocks with American colours flying, and a pine tree fallen. In the back ground, a rising sun and view of the ocean. The legend round the field is in these words: *Sigillum Reipublicæ Neo Hantoniensis*, 1784.

All Judges, Sheriffs, Recorders of deeds, the Attorney and Commissary-General, Secretary, Treasurer and continental military officers, the President, Professors and Instructors of colleges, and officers of the customs are incapable of having a seat in the legislature.

All judicial officers hold their places during good behaviour; but are removeable on the address of both houses of legislature, by the President, with consent of the Council.

No person is capable of holding more than two offices of profit at the same time; and no judge of the superior court can hold any other office than that of justice of the peace, nor receive any pension or salary from any other State or power whatever.

To preserve an adherence to the principles of the constitution, and to make such alterations as experience may render necessary, provision was made, that at the end of seven years, a convention should be called to revise the form of government. The year 1791 being the seventh year, a Convention was called, and is now subsisting by adjournment. Any alteration which may be proposed by them must be laid before the towns and approved by two thirds

‘ of the qualified voters present,’ before it can be established.

The *judicial* department consists of, 1st. A *Superior Court*, in which a Chief Justice presides, and three other Justices assist. This court has cognisance of high crimes and misdemeanors. It receives appeals from the inferior courts and courts of probate, and determines causes of marriage, divorce and alimony. It has two circuits in a year, through the several counties. 2d. An *Inferior Court* in each county, where civil actions of a certain value originate ; but no criminal causes are tried. This court has four Justices, and is holden four times in a year. 3d. A *Court of General Sessions* of the peace, holden in each county the same week as the inferior courts. It consists of the Justices of the peace in the county. It has cognisance of smaller crimes and breaches of the peace ; and takes care of various occasional and prudential matters. 4th. A *Court of Probate* of wills in each county holden once in a month by one Judge assisted by a Register. This court has cognisance of all matters relative to the settlement and descent of estates, testate or intestate ; the care of widows and orphans, idiots and persons insane, and the management of confiscated estates.

Civil actions of more than ten pounds value are brought first before the Inferior Courts ; from the judgment of which, either party may appeal to the Superior Court ; where a new trial is had ; and if either party think himself aggrieved, he may within three years bring a writ of review, and have another trial at the same court, which is final.

In all these courts, causes are determined by a jury of twelve freeholders ; who are chosen in the following manner. The Selectmen of the several towns make a list of the names of all persons within their limits, who in their opinion are qualified, and

have an estate of fifty pounds value. One third of these names are put into one box, and two thirds into another. Out of the former, which is supposed to contain the names of the best qualified, are drawn jurors for the superior, out of the other for the inferior court. This is done in public town meeting, by the town clerk, or one of the selectmen ; and a summons having been previously sent, by the constable, to the persons thus chosen, their names are returned to the clerk of the court. Grand jurors are also chosen by the inhabitants assembled in town meeting. Before the year 1758, jurors were appointed by the sheriff according to the custom in England.

In criminal causes, a grand jury consisting of any number, between twelve and twenty-four, find a bill of indictment ; which is afterward tried, by a petit jury of twelve, who must be unanimous in their verdict. In the trial of criminals, the courts proceed with great tenderness. The system of penal laws is mild. Six offences only are capital ; arson, burglary, murder, robbery, sodomy, and treason. During the last twenty-five years, there have been no more than two capital executions in the State, both of which were for murder.

A collection of the laws was made and printed in 1771, to which were prefixed the commissions of President *Cutts*, and of the then Governor ; and several acts of Parliament which related to the colonies were intermixed. The laws made after the revolution were printed in 1780. To this edition was prefixed the temporary constitution during the war ; and subsequent acts were printed in a similar page till the year 1789, when a new edition was printed containing the perpetual laws, passed since the revolution. To this edition is prefixed the present form of government, and bill of rights. Another and more perfect edition is now in the press.

It is difficult for any person, but one whose professional business leads him to a practical acquaintance with the laws, to give a just and comprehensive view of the whole system; dispersed as it is in several books, and many loose papers; some of which are confessed to be imperfect. Such particulars as can be supposed of any importance, to persons not residing in the State, shall be briefly mentioned. The inhabitants may easily obtain more exact information.

Conveyance of real estate is made by deeds signed, sealed and acknowledged before a justice of the peace, and recorded in the office of county register. A conveyance is not valid against any other person but the grantor, unless it be thus acknowledged and recorded. Powers of Attorney, by which a conveyance is made, and affidavits in *perpetuam rei memoriam* may also be recorded; and a copy from the record is legal evidence.

Debts, not exceeding ten pounds value, may be recovered before a single justice of the peace; who may grant a rule to refer the same to persons mutually chosen, and upon their award may enter judgment and issue execution. If a debtor *confess* before a justice a debt not exceeding ten pounds, a record is made, and execution is issued or stayed by consent of the parties. Mutual debts and executions may be set off against each other, and the balance, if any, may be levied by the sheriff. Prisoners for debt are allowed a chamber in the jailor's house, and liberty of the yard. They may employ themselves in the business of nail-making, the materials for which are provided by the county; and the labourer is allowed one fourth part of the nails which he makes. If he make oath that he is not worth more than six pounds and one suit of clothes,

he may be discharged from confinement ; but not from his obligation to the creditor.

Criminal prisoners may be sentenced by the courts to make nails ; which are to be taken in payment of the fines, damages or costs to which they are by law subjected for their offences.

Estates may be devised by will, attested and subscribed in the presence of three witnesses. Posthumous children, and children for whom no legacy is devised in the will of the parent, have the same right in the estate, as if the devisor had died intestate. Probate of wills must be made within thirty days ; and executors must give bond, for the faithful performance of duty. Division of estates is ordered by the judge of probate, on the application of the heirs ; and where an estate lies in common with others, partition is made by the same authority.

Estates intestate descend in equal shares, to children or their legal representatives, and the dower to widows. Personal estate is liable for debts ; and, if insufficient, real estate is also chargeable ; provision to be first made for the widow out of the personal estate, by the judge. Administration is granted to the widow, or next of kin, or to both, at the discretion of the judge, within thirty days after the decease ; and if the widow or next of kin neglect or refuse to administer, then letters of administration may be granted, to one or more of the principal creditors, upon giving bond with sureties. The judge also appoints guardians for minors and persons *non compos*, and representatives for absent heirs.

The husband during his life is heir to his wife as tenant by courtesy.

If creditors living within the State neglect to exhibit demands beyond two years, or living without the State, beyond three years, after a will be proved or administration be taken, the debt is extinguished,

Executors and administrators are exempt from personal arrests, unless in case of waste and embezzlement.

Estates Insolvent are distributed in average among creditors, by commissioners appointed by the judge of probate. The reversion of widow's dower is subjected to the payment of debts ; and may be sold as the rest of the estate.

Proprietors of *Lands* holden in common, and undivided, may agree upon methods of calling proprietary meetings ; but where no particular mode hath been agreed on, the owners of one sixteenth part of the whole interest may obtain a warrant, from a justice of the peace, to call a meeting ; which warrant must be printed in the New-Hampshire gazette. The share of every proprietor is charged with the payment of any sums, voted at a legal meeting, and of all public taxes. The collectors have a right to sell the shares for non payment ; reserving to the proprietor, liberty of redemption, within two months.

Trespassers on common lands are liable to the payment of heavy fines, if convicted on positive proof ; but when circumstantial evidence only appears, they have the liberty of clearing themselves by oath.

Partition of common lands may be ordered by the judge of probate in the county where the land lies.

Grants of land cannot be forfeited for non-performance of conditions, but by the verdict of a jury, after a solemn hearing in the superior court, at the prosecution of the attorney-general. After a verdict of forfeiture, the judges have a power of chancery, in favor of individual grantees.

The dimensions of the different kinds of *Lumber* are regulated by law. Surveyors were formerly

chosen by the towns ; but are now appointed by the President and Council, at those places where lumber is delivered. The penalty for delivering or receiving lumber without a survey, is a forfeiture of one fourth part.

Marriages were formerly solemnised, by virtue either of a publishment, or of a licence from the Governor. The granting of these licences was accounted part of the royal prerogative ; but this practice ceased at the revolution. The intention of the parties is now uniformly published three times, within the towns where they reside. Ministers of the gospel and justices of the peace may perform the marriage ceremony, within the limits of the county. Any other person, presuming to do it, is subjected to a fine of one hundred pounds ; saving to the people called Quakers, their peculiar custom. A return of marriages is made to the town-clerks, and recorded.

On the *Sabbath*, all unnecessary travelling, loitering and indecent behaviour are forbidden, under certain penalties. Tything men in the several towns are to see this law executed.

Slavery is not prohibited by any express law. Negroes were never very numerous in New-Hampshire. Some of them purchased their freedom, during the late war, by serving three years in the army. Others have been made free by the justice and humanity of their masters. In Massachusetts, they are all accounted free, by the first article in the declaration of rights. 'All men are born free and equal.' In the bill of rights of New-Hampshire, the first article is expressed in these words, 'All men are born equally free and independent ;' which, in the opinion of most persons, will bear the same construction. But others have deduced from it this inference, that all who are *born*, *since the constitution*

was made, are free ; and that those who were in slavery before, remain so still. For this reason, in the late census, the blacks, in New-Hampshire, are distinguished into free and slaves. It is not in my power to apologise for this inconsistency. However, the condition of most of those who are called slaves, is preferable to that of many who are free in the neighbouring State. They are better provided with necessaries ; their labour is not more severe than that of the white people in general ; and they are equally under the protection of the law.*

Slitting and rolling mills for iron, linseed oil mills, and sail cloth manufactories, are exempted from taxes for ten years.

Flax-seed is put up in casks of seven bushels, or three bushels and a half. Inspectors of flax-seed, and of pot and pearl-ashes, are appointed by the president and council, who are to examine the contents of each cask, and brand it for exportation.

Every township in New-Hampshire is a distinct corporation, having a power of choosing all town officers, which are named in the laws, and of raising money by taxes for the support of ministers, schools, bridges, highways, the maintenance of the poor, and other public purposes. Three or five *Selectmen* are annually chosen in each town, who are entrusted with its general concerns, and are commonly styled *FATHERS of the town*, a name expressive of their prudential character, and of the confidence which is reposed in them by the people.

Before the assumption of the State debts by the Congress, the public revenue of the State arose from three sources ; an impost, an excise, and a tax upon

* By a law made in the 4th of George I. and still in force, it is enacted ; ‘ that if any man smite out the eye or tooth of his man servant or maid servant, or otherwise maim and disfigure them, he shall let him or her go free from his service ; and shall allow such further recompense as the court of quarter sessions shall adjudge. Also, that if any person kill his Indian or negro servant, he shall be punished with death.’

polls and estates. Since the assumption, the two former are levied by the general government throughout the union. The sum allowed to be received in the certificates of New-Hampshire, is three hundred thousand dollars. If this whole sum be subscribed, the domestic debt of the State will be reduced to a trifle; but whether New-Hampshire be a debtor or a creditor State, cannot be known till a final adjustment of the public accounts be made, by the commissioners appointed by Congress.

Taxation by polls and estates, is conducted in the following manner. Once in several years, an act is passed by the General Court, specifying the proportion which each town shall pay to one thousand pounds. When any sum is voted for a State tax, each town immediately knows its proportion, and a warrant is issued from the treasurer to the selectmen to levy it. They then proceed to tax every inhabitant, by an invoice of rateable estate, which is taken annually in the month of April.

In this invoice, every male poll between eighteen and seventy years of age, is estimated at ten shillings. The several kinds of rateable estate, are estimated as follows, viz.

Horses and oxen of five years old at	3s.
Cows of five years old	2s.
Horses and cattle of four years	1s/6
Ditto of three years	1s.
Ditto of two years	6d.
Orchard land per acre	1s/6
Arable ditto	1s.
Mowing ditto	1s.
Pasture ditto	5d.

Mills, wharves and ferries at one twelfth part of the neat yearly income. All other buildings, and all uncultivated land at half of one per cent. of the real value.

Stock in trade according to its real value.

Money at interest, at three fourths of one per cent.

If any person refuse to give an invoice of his rateable estate, it is in the power of the selectmen 'to 'set down to such person as much as they judge 'equitable, by way of *doomage* ; from which there is 'no appeal.'

County taxes are laid by the justices of the quarter session, and the county treasurer issues his warrant to each town, specifying its proportion.

Town taxes are either voted by the inhabitants in town meetings, or laid by the selectmen, at their discretion.

Every town chooses one or more collectors, to whom the several tax bills are committed, with sufficient warrant to take property by distrain, or commit delinquents to prison.

The State tax for the year 1790, amounted to £1050, of which the several counties paid the following proportions.

Rockingham	£349	1
Strafford	165	19 7
Hillsborough	266	15 10
Cheshire	181	13 11
Grafton	85	15
Locations	14	8

£1050

By the constitution, the President is captain general and commander in chief of the militia. In his military character he acts without the advice of the executive council, excepting when he grants commissions for executing martial law.

The President and Council appoint general and field officers of the militia. Major Generals appoint

their Aids, and Brigadiers their Majors of brigade. Field officers recommend Captains and subalterns to the President, from whom they receive their commissions. Commanding officers of regiments constitute Adjutants and Quarter-masters ; Captains and subalterns appoint their non-commissioned officers.

All able bodied men from sixteen to forty years of age, are enrolled in the training band ; excepting members of Congress and the legislature ; civil officers ; clergymen ; deacons ; church wardens ; instructors, graduates and students of colleges and academies ; schoolmasters ; quakers ; selectmen ; commissioned officers and non-commissioned officers of more than thirty-five years of age ; ship masters ; physicians and surgeons ; ferrymen ; millers ; indians, negroes and mulattoes.

Each regiment has one colonel, one lieutenant colonel, and two majors. Each company consists as nearly as may be of sixty-eight rank and file ; commanded by one captain, two lieutenants, and one ensign.

Men capable of bearing arms, from forty to sixty years of age, and who are exempted from the training band, are called the alarm list ; excepting members of Congress, and the legislature, clergymen, officers and students of colleges and academies, quakers, ferrymen, indians, negroes and mulattoes. These are formed into companies ; the officers are elected by the companies, and have the rank of field officers.

By the militia law, every non-commissioned officer and private, both of the alarm list and training band, is to have in readiness a musquet and bayonet, with all the necessary appendages, accoutrements and ammunition, suitable for a marching soldier.

The training band is to be mustered four times, and the alarm list twice in a year.

Courts martial are instituted for the trial of disobedience and other offences. In time of invasion or of war, draughts are made from the militia, unless a sufficient number appear as volunteers, which is generally the case. The forces when drawn into actual service are subjected to the regulations of the late continental army.

The militia at present is formed into twenty-five regiments of infantry, which are divided into five brigades ; three regiments of cavalry, which make another brigade ; one independent corps of light horse ; and one regiment of artillery.

The staff consists of one captain-general, two major-generals ; six brigadier-generals ; one adjutant-general, and one commissary-general.

The forces of the State are computed as follows :

Twenty-five regiments of training band	}	18750
at 750 each		
Total of the alarm list		7500
Three regiments, and one independent	}	1000
corps of cavalry		
One regiment of artillery		300

Total 27550

C H A P. XVII.

Education, Literature, Religion.

THE old laws of New-Hampshire required every town of one hundred families to keep a grammar school; by which was meant a school in which the learned languages should be taught, and youth might be prepared for admission to a university. The same preceptor was obliged to teach reading, writing and arithmetic; unless the town were of sufficient ability to keep two or more schools, one of which was called a grammar school by way of distinction. Formerly, when there were but few towns, much better care was taken to observe the law concerning schools than after the settlements were multiplied; but there never was uniform attention paid to this important matter in all places. Some towns were distinguished for their carefulness, and others for their negligence. When the leading men in a town were themselves persons of knowledge and wisdom, they would provide the means of instruction for children; but where the case was otherwise, methods were found to evade the law. The usual way of doing this, was to engage some person to keep a school, for a few weeks before the court term, and discontinue it soon after. It was the interest of ignorant and unprincipled men, to discourage literature; because it would detract from their importance, and expose them to contempt. The people in some places, being thus misled, thought it better to keep their children at work, than provide schools for their instruction.

Several instances occur in the public records, as far back as the year 1722, just at the beginning of

an Indian war ; that the frontier towns petitioned the assembly, for a special act, to exempt them from the obligation to maintain a grammar school, during the war. The indulgence was granted them, but only on this condition, 'that they should keep a school for reading, writing and arithmetic,' to which all towns of fifty families were obliged. In later times the conduct of the same towns has been very different. During the late war with Britain, not only those, but many other towns, large and opulent, and far removed from any danger by the enemy, were, for a great part of the time, destitute of any public schools ; not only without applying to the legislature for permission ; but contrary to the express requirements of law, and notwithstanding courts of justice were frequently holden, and grand jurors solemnly sworn and charged to present all breaches of law, and the want of schools in particular. This negligence was one among many evidences of a most unhappy prostration of morals during that period. It afforded a melancholy prospect to the friends of science, and of virtue ; and excited some generous and philanthropic persons to devise other methods of education.

Among these the Honourable JOHN PHILLIPS, Esq. of Exeter, was the first to distinguish himself, by founding and endowing a seminary of learning in that town ; which, in the year 1781, was by an act of assembly incorporated by the name of 'Phillips's Exeter academy.' It is placed under the inspection of a board of trustees ; and is governed by a preceptor and an assistant. In this academy are taught the learned languages, the principles of geography, astronomy, mathematics, and logic ; besides writing, music, composition and oratory. Particular attention is given to the morals of the students and their instruction in the principles of nat-

ural and revealed religion, and the exercises of piety and virtue. The fund belonging to this institution, is valued at nearly ten thousand pounds. About one fifth part of this fund, lying in lands, is at present unproductive ; but the actual income amounts to £480 per annum.

The appropriations are as follows.

To the support of a preceptor	£133	6	8
——ditto of an assistant	70		
Intended for a professor of divinity	133	6	8
To the maintenance of indigent scholars	120		
	<hr/> £456 13 4 <hr/>		

The first preceptor was Mr. William Woodbridge.

The present preceptor is Mr. Abbot.

In the following table the number of scholars belonging to this academy in each of the four last years is noted in the second column ; and of them, the number whose parents reside in Exeter is noted in the third column.

<i>Years.</i>	<i>No. of Students.</i>	<i>Residents in Exeter.</i>
1787	24	14
1788	30	14
1789	50	27
1790	53	29

It has been thought by some, that the tendency of such institutions is to discourage Grammar Schools in their vicinity. In support of this sentiment it is alleged that before this academy was founded, the town of Exeter supported two grammar schools ; and that now it supports but one. In answer to this argument it is observed, that though one grammar school is discontinued, yet its place is supplied by a school for reading, writing and arithmetic ; and there have been, during the last and

present year, six schools kept in the most populous part of that town, for the instruction of small children, besides those which are supported in the extreme parts. In addition to this observation it ought to be remembered that the academy was first instituted, at a time, when there was a general neglect of town schools in many places ; and had it not been for this and other similar institutions, the neglect might have increased by insensible degrees, till ignorance had overspread the country.

Since the establishment of this academy several others have been erected. One of which is at New-Ipswich. It was incorporated in 1789. Its fund is about one thousand pounds. The number of students is generally between forty and fifty. The price of tuition is one shilling per week and of boarding five shillings. The preceptor is Mr. John Hubbard. This academy is so far from discouraging town schools, that the sum of one hundred pounds is annually raised in the same town for that purpose.

There is another academy at Atkinson, founded by the Honourable NATHANIEL PEABODY Esq. and incorporated by the General Court in the year 1790. The preceptor has been chiefly supported by Mr. Peabody, and he has endowed the academy with a donation of one thousand acres of land.

Similar institutions have been begun at Amherst, at Charlestown and at Concord ; which though at present in a state of infancy, yet afford a pleasing prospect of the increase of literature in various parts of the State.

A law has been lately made which enforces the maintenance of schools by a peculiar sanction ; the selectmen of the several towns are liable to have the same sum distrained out of their estates, which would be sufficient to support a school, during the whole time in which they neglect to make that provision.

This law is so recent, that no judgment can as yet be formed of its operation. It shews however that the legislature are attentive to this most important branch of their duty, the education of children.

As a farther evidence of the progress of science, social libraries are established in several towns; and within the year past a medical society has been incorporated by an act of assembly. The President of the State being a gentleman of the faculty, is at the head of this society.

By an article in the constitution of the State it is declared to be 'the duty of legislators and magistrates, to cherish the interest of literature and the sciences, and all seminaries and public schools; to encourage private and public institutions, rewards and immunities for the promotion of agriculture, arts, sciences, commerce, trades, manufactures and the natural history of the country; to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and economy, honesty and punctuality, sincerity, sobriety, and all social affections, and generous sentiments among the people.' As far as public rulers conform to this article, they promote in the most effectual manner, the true interest and prosperity of their country.

The establishment of DARTMOUTH COLLEGE in the western border of the State, has proved a great benefit to the new settlements and to the neighbouring State of Vermont. During the late war, like all other seminaries of literature, it lay under discouragement; but since the peace, it is in a more flourishing situation.

Its landed interest amounts to about eighty thousand acres, of which twelve hundred lie contiguous, and are capable of the best improvement. Twelve thousand acres are situate in Vermont. A tract of

eight miles square beyond the northern line of Stuart town was granted by the assembly of New-Hampshire in 1789 ; and in the act by which this grant was made, ‘ the President and Council of the State ‘ for the time being are incorporated with the trustees of the college, so far as to act with them in ‘ regard to the expenditures and application of this ‘ grant, and of all others which have been or may ‘ be hereafter made by New-Hampshire.’

The revenue of the college arising from the lands, amounts to one hundred and forty pounds per annum. By contracts already made it will amount in four years to four hundred and fifty ; and in twelve years to six hundred and fifty pounds. The income arising from tuition money is about six hundred pounds per annum.

The first building erected for the accommodation of the students was a few years since burned. A lottery was granted by the State for raising the sum of seven hundred pounds ; which has been applied to the erection of a new building, much more convenient than the former. It is constructed of wood, and stands in an elevated situation, about half a mile eastward of Connecticut river in the township of Hanover ; commanding an extensive and pleasant prospect to the west. It is one hundred and fifty feet long, fifty feet wide, and thirty six feet high ; and contains thirty-six chambers for students. The number of students who were graduated in the first nineteen years amounts to two hundred and fifty-two, among whom were two Indians. In the year 1790 the number of undergraduates was about one hundred and fifty.

The students are divided into four classes. The freshmen study the learned languages, the rules of speaking and writing, and the elements of mathematics.

The sophomores attend to the languages, geography, logic and mathematics.

The junior sophisters, beside the languages, enter on natural and moral philosophy and composition.

The senior class compose in English and Latin ; study metaphysics, the elements of natural and political law.

The books used by the students are Lowth's English Grammar, Perry's Dictionary, Pike's Arithmetic, Guthrie's Geography, Ward's Mathematics, Atkinson's Epitome, Hammond's Algebra, Martin's and Enfield's Natural Philosophy, Ferguson's Astronomy, Locke's Essay, Montesquieu's Spirit of Laws, and Burlamaqui's Natural and Political Law.

Besides these studies, lectures are read to the scholars in theology and ecclesiastical history.

There is an examination of each class once in the year, and those who are not found qualified for their standing are put into a lower class.

The annual commencement is held on the fourth Wednesday in August. There are two vacations, one following commencement and continuing six weeks and two days ; the other beginning on the fourth Monday in February, and continuing five weeks and five days.

Among the benefactors to Dartmouth College, the following names are conspicuous.

His Majesty George III. King of Great Britain.

The Earl of Dartmouth.

The late Countess of Huntingdon.

The Prince of Orange.

The Baron of Harsfwoode.

The late Grand Pensionary of the United Netherlands.

The late Governor Benning Wentworth.

The late Governor John Wentworth.

Paul Wentworth, Esq. }
 Dr. Rose, }
 John Thornton, Esq. } of London.

Mr. Forsyth, }
 Dr. Ralph Griffith, }

The late Dr. Franklin.

John Adams, Vice President }
 John Jay, Chief Justice } of the United States.

The Hon. John Phillips, of Exeter.

The late and present officers and trustees of the
 college are as follows ;

Presidents. 1770. Rev. Eleazer Wheelock, D. D.
 died 1779, Æt. 69.

1779. John Wheelock, L. L. D.

Professor of History. John Wheelock, L. L. D.

——— of *Mathematics* and } Beza Wood-
Natural Philosophy, } ward Esq.

——— of *Languages* }
 and *Librarian,* } Rev. John Smith.

Trustees.

His Excellency John Wentworth, Esq. *removed.*

* Hon. Theodore Atkinson.

* Hon. Daniel Pierce.

Hon. George Jaffrey, *resigned.*

* Hon. Peter Gilman.

* Hon. William Pitkin.

* Rev. Benjamin Pomeroy, D. D.

* Rev. James Lockwood.

Rev. Timothy Pitkin, *resigned.*

Rev. John Smalley, *resigned.*

* Rev. William Patten.

Hon. John Phillips.

Beza Woodward, Esq.

Hon. John Sherburne, *resigned.*

Hon. Elisha Paine.

Rev. Eden Boroughs.

Hon. Samuel Phillips, *resigned.*

Rev. David M'Clure.

Rev. Joseph Huntington, D. D. *resigned.*

Hon. Simeon Olcott.

Rev. Levi Hart, *resigned.*

Hon. John Langdon.

* Rev. Sylvanus Ripley.

Moses Fisk, A. M.

* Rev. Bulkley Olcott.

Hon. Peter Olcott.

Rev. John Smith.

Rev. Job Swift.

An Alphabetical TABLE of the Towns in each County of New-Hampshire,

With the dates of their incorporation : The names of the several MINISTERS of the GOSPEL of every denomination, the times of their settlement, death or removal, and their age at the time of their death as far as either can be ascertained. Also,

The number of people in each town in the years 1775 and 1890. The number lost out of each town in the late war, as far as it could be collected. The proportion which each town pays to £.1000 tax. The Literary Academies in each county, and some historical and topographical remarks.

COUNTY OF ROCKINGHAM.

Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical			
incorporated.	names.	settled	names.	died or removed.	age	1775	1790	lost in war	Taxes to £1000.	f. s. d.	Remarks.
1767	Allen's town	1772	Stephen Peadody			149	254		1	8	
1727	Atkinson					575	479		4	10	
1742	Bow					350	568		5	4	
	Brentwood	1752	Nathaniel Trask	1789	67	1100	976	12	10	17	part of Haverhill cut off by the line.
		1775	Samuel Shepard								Indian name <i>Penacock</i> .
											part of Exeter.
1763	Candia	1771	David Jewett	r. 1780		744	1040		3	2	part of Chester.
		1782	Joseph Prince	r. 1789							
		1790	Jesse Remington								
1727	Canterbury	1761	Abiel Foster	r.		723	1038		8	4	
		1791	Frederick Parker								
1722	Chester	1731	Moses Hale	r. 1734		1599	1902	26	16	2	
		1736	Ebenezer Flagg								
		1734	John Wilson	1780	76						
1727	Chichester	1791	Josiah Carpenter			418	491		5	4	
1765	CONCORD	1730	Timothy Walker	1782	78	1052	1747		12	7	Indian name <i>Penacock</i> , granted by Massachusetts, and called <i>Rumford</i> .
		1789	Israel Evans								part of Nottingham.
1766	Deerfield	1772	Timothy Upham			929	1619		12	6	part of Kingston.
1738	East-Kingston		Peter Coffin	r. 1772		428	358		4	2	part of Exeter.
1741	Epping		Cutler	r.		1565	233		13	3	
		1758	Josiah Stearns	r. 1790							
1727	Epsom	1761	John Tucke.	r. 1774		387	799		5	12	

COUNTY OF ROCKINGHAM.

NEW-HAMPSHIRE.

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Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical		
incor- porat- ed.	names.	set- tled.	names.	died or remov- ed.	age.	1775	1790	lost in war.	Taxes to £1000	Remarks.
1638	EXETER	1638	Ebenezer Hazeltine	r. 1643		1741	1722	38	£. s. d. 15 19 2	first called Swamscot falls.
		1650	John Wheleright	1683	77					
		1698	Samuel Dudley	1705	35					
		1706	John Clarke	1754	72					
		1743	John Odlin	1776	57					
		1776	Woodbridge Odlin	r. 1787						
		1790	Isaac Mansfield							
		1748	William Fred. Rowland	1785	79					
2d Parish		1738	Daniel Rogers	1775		44	93			
* Gosport		1713	John Tucke	1760	84	759	634		6 6	part of Portsmouth.
Greenland		1756	William Allen							
			Samuel Macclintock, D. D.							
1749	Hamstead	1752	Henry True	1782		768	724		5 19	
1638	Hampton	1638	Stephen Batchelor	r. 1641		862	253	6	8 19 7	Indian name Winicomet, first settled under Massa- chusetts.
		1639	Timothy Dalton	1661						
		1647	John Wheleright							
		1660	Seaborn Cotton	r. 1686	53					
		1696	John Cotton	1710	57					
		1710	Nathaniel Cookin	1734	48					
		1734	Ward Cotton	r. 1765						
		1766	Ebenezer Thayer							
Hampton-falls		1712	Theophilus Cotton	1726	45	645	541		5 19 5	part of Hampton.

COUNTY OF ROCKINGHAM.

incorporated.	Towns.	Ministers.		Numbers.			Proportion of		Historical and topographical	
		set- tled.	names.	set- tled or removed.	age.	1775	1790	lost in war.	Taxes to £. 1000	Remarks.
1760 1737	Hawke Kensington	1727	Joseph Whipple.	1757	57					
		1757	Josiah Bailey	1762	29					
		1763	Paine Wingate	c. 1771						
		1780	Samuel Langdon, D. D.							
1694	Kingston	1763	John Page	1783	43	504	420		4 17 3	part of Kingston.
		1737	Jeremiah Fogg	1789	78	797	800		8 16 9	part of Hampton.
		1725	Ward Clarke	1737	34	961	906		8 11 1	
		1737	Joseph Secombe							
1722	Londonderry	1762	Amos Tappan.	1771						
			Elihu Thayer							
		1719	James M'Gregore	1729	52	2590	2622	19	20 15 3	
		1729	Matthew Clarke							
2d Parish		1732	Alexander Thompson	1738						
		1740	William Davidson.	1791	81					
		1737	David M'Gregore	1777	67					
		1783	William Morrison							
1773 1693	Loudon Newcastle	1789	Jedediah Tucker							
		1704	John Emerson	c. 1712		349	1084		6 14 8	part of Canterbury.
		1712	William Shurtleff	c. 1732		449	534		1 5 9	
		1732	John Blunt							
		1750	Stephen Chase	1775						

COUNTY OF ROCKINGHAM.

NEW-HAMPSHIRE.

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Towns		Ministers.		Numbers.				Proportion of		Historical and topographical	
incor- porat- ed.	names.	set- tled.	names.	died or remov- ed.	age.	1775	1790	lost in war.	Taxes to £. 1000	Remarks.	
		1784	Oliver Noble	r.							
	Newington	1715	Joseph Adams	1783	93	532	542		4 17 9	part of Portsmouth & Dover.	
		1787	Joseph Langdon								
1727	Newmarket	1730	John Moody	1778	73	1289	1137		9 16	part of Exeter.	
			Nathaniel Ewer								
1749	Newton	1759	Jonathan Eames	r. 1791		540	530		3 16 9		
1780	Northfield						606		3 18 1	part of Canterbury.	
1742	N. Hampton	1739	Nathaniel Gookin	1766		652	657		6 2 11	part of Hampton.	
		1767	Joseph Stacy Hastings	r. 1774							
		1776	David M'Clure	r. 1784							
1773	Northwood B.	1784	Benjamin Thurston								
		1779	Edmund Pillsbury			313	744	2	5 19 3	part of Nottingham.	
1722	Nottingham	1742	Stephen Emery	r.		999	1068		8 13 6		
		1758	Benjamin Butler	r. 1770							
1746	Pelham	1765	Amos Moody			749	791		7 4 6		
1759	Pembroke	1736	Aaron Whittemore	1767		744	956		7 10 11	Indian name. <i>Suncook</i> , grant- ed by Massachusetts 1728 and called <i>Lowewell's town</i> .	
		1768	Jacob Emery								
			Zacheus Colby								
1749	Plastow	1760	— Mitchel								
		1730	James Cushing			575	521		4 5 5	part of Haverhill cut off by	

COUNTY OF ROCKINGHAM.

Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical	
incor- porat- ed.	names.	set- tled.	names.	died or removed. a.d.	age.	1775	lost in war.	Taxes to £. 1000	Remarks.
1764 1693	Poplin PORTSMOUTH	1765	Gyles Merrill			552	493	5 8 2	the line.
		1671	Joshua Moody	1697	65	4590	4720	26 15 3	part of Exeter.
		1699	Nathaniel Rogers	1723	54				
		1725	Jabez Fitch	1746	73				
		1747	Samuel Langdon, D.D.	r. 1774					
		1779	Joseph Buckminster						
	2d Parish	1715	John Emerson	1732	62				
		1732	William Shurtleff	1747					
		1749	Job Strong	1751					
		1752	Samuel Haven, D. D.						
	Episcopal	1736	Arthur Browne	1773	73				
	3d Parish	1787	John C. Ogden	1770	49				
			Samuel Drown						
			Joseph Walton						
			Page						
1782 1764 1719	Pittsfield Raymond Rye	1726 1736	Nath. Morrill Samuel Parsons	r. 1734 1789	78	683 870	888 727 865	5 7 2 6 4 8 6 8 9	part of Chichester. part of Chester.

COUNTY OF ROCKINGHAM.

NEW-HAMPSHIRE.

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Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical.	
incorporated.	names.	settled.	names.	did or removed.	age.	lost 1775	lost 1790 in war.	Taxes to £. 1000	Remarks.
1750	Salem	1784	Hunting Porter			1084	1218	31	£. s. d. 9 2 1
	B.	1740	Abner Bailey						cut off from Methuen and Haverhill by the line.
1756	Sandown	1789	Samuel Fletcher	1781		459	561		part of Kingston.
		1759	Josiah Cotton						
1768	Seabrook, P. Q.	1765	Samuel Collins	r. 1775		607	715		4 9 4
			Samuel Perley						formerly part of Hampton.
1742	S. Hampton.	1743	William Parsons	r. 1762		498	448	5	5 12 6
		1763	Nathaniel Noyes						formerly part of Hampton.
1693	Streatham	1718	Henry Russ	1749	63	1137	882	17	9 11
		1756	Joseph Adams	1785	66				Swamscot patent, part of it called by the Indians <i>Winicot</i>
		1786	Jsmes Miltimore						
	Windham, P.	1760	—Johnson	r.					
1741			{ John Kinkeed						
		1766	Simon Williams	r.		529	663		5 8 8
L I T E R A R Y A C A D E M I E S									
Date of Institution.		Towns.		Value of Funds.		Names of Preceptors.			
1781		Exeter		£. 10,000		William Woodbridge Benjamin Abbott			
1789		Atkinson							
1790		Concord							

L I T E R A R Y A C A D E M I E S

Date of Institution.		Towns.	Value of Funds.	Nums of Preceptors.	
1781		Exeter	£. 10,000	William Woodbridge	Benjamin Abbott
1789		Atkinson			
1790		Concord			

COUNTY OF STRAFFORD.

Towns.	Ministers.	Numbers.	Proportion of	Historical and topographical.					
incorporated.	names.	set- tled.	names.	died or removed. ed.	age.	1775	1790 in war.	Taxes to £. 1080	Remarks.
1727 Barnstead		1775	Joseph Prince	r. 1769		252	807	£. s. d. 4 18 6	
1722 Barrington	Q.	1771	David Tenney	1778		1655	2470	4 14 6 8	
Conway		1784	Benjamin Balch			273	574	4 3 7	Indian name Pigwacket.
Dover		1778	Nathaniel Porter			1666	1998	29 14 13	Indian names Winichahanat, and Cochee; by the first settlers called Northam.
		1642	Daniel Maud	1655					
		1657	John Reyner	1669					
		1671	John Reyner, jun.						
			John Pike	1710					
		1711	Nicholas Sever	1715					
		1717	Jonathan Cushing	1769	79				
		1767	Jeremy Belknap						
		1787	Robert Gray	r. 1786					
	Q.								
Durham		1718	Hugh Adams	1750	74	1214	1247	20 10 16 2	formerly part of Dover, called Oyster river.
		1741	Nicholas Gilman	1784					
		1748	John Adams	r. 1778					
1766 Eaton		1780	Curtis Coe					1 16 2	

COUNTY OF STRAFFORD.

NEW-HAMPSHIRE.

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Towns.		Ministers.			Numbers.			Proportion of		Historical and topographical	
incorporated.	names.	settled.	names.	died or removed.	age.	1775	1790	lost in war.	Taxes to £. 1000	Remarks.	
1727	Effingham	1774	Isaac Smith			83	154		1 12 5	formerly Leavitt's town.	
	Gilmantown B.	1786	Walter Powers			775	2613	7	15 4 5		
1766	Lee		Samuel Hutchins			954	1029		8 2 4	formerly part of Dover and Durham.	
	Locations.										
	S. Stark						51		2 5		
	A. Stark								2		
	H. Stark								5 8 9	formerly part of Dover.	
1755	Madbury B.		William Hooper			677	592		6 7	first called New Salem.	
1768	Meredith B.		Nicholas Folsom			239	881		3 8 6		
1778	Middletown.	1778	Nehemiah Orway			233	617		4 10 10		
1777	Moultonborough	1778	Samuel Perley	c. 1779		272	565	5	3 18 9		
		1779	Jeremy Shaw						3 1 2		
1762	New Durham	1773	Nathaniel Porter	c. 1777		286	554		3 10 10	called at first Moultonboro' addition.	
	N. Durham Gore					100	445		1 12 6		
1777	New Hampton						652		9 11		
1785	Office.					26	339				
1732	Rochester	1737	Amos Maine	1760	51	1548	2857	29			
		1760	Samuel Hill	1764							
		1766	Avery Hall	c. 1775							
		1776	Joseph Haven								

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COUNTY OF STRAFFORD.

Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical.	
incorporated.	names.	settled.	names.	died or removed.	age.	1775	lost 1790 in war.	Taxes to £. 1000	Remarks.
1770	Sanborn Town	1771	Joseph Woodman			450	1587	£. 11 14 5	
1763	Sandwich } B.		— Jewel			243	905	7 13 11	
1764	addition. }								
1754	Somersworth	1730	James Pike	1792	89	965	943	8 14 10	formerly part of Dover.
1766	Tamworth					151	266	2 3 2	
	Tuftonboro'						109	18 7	
1774	Wakefield	1785	Asa Piper			320	646	4 16 2	formerly East-Town and Watertown.
	Wolfborough					211	447	3 14 3	

N. B. The land comprehended in Middletown, New Durham, N. Durham Gore, and part of Gilmantown, Wakefield and Wolfborough is the tract which was called *Kingswood*, and which Governor Belcher was prohibited from granting before the settlement of the boundary lines.

COUNTY OF HILLSBOROUGH.

NEW-HAMPSHIRE.

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Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical	
incorporated.	names.	settled.	names.	died or removed.	age	1773	1790	lost in war	Taxes to £1000.
									£. s. d.
1762	AMHERST	1741	Daniel Wilkins	1784	73	1428	2369		16 4 4
	2d Parish	1779	Jeremiah Barnard						
	3d Parish	1786	John Bruce						
1779	Andover	1783	Josiah Badcock			179	645		3 15 7
1777	Antrim						528		3 6 8
1750	Bedford P.	1757	John Houston	r. 1778		495	898		6 15 9
1760	Boscawen		Phineas Stevens			585	1108		7 11 4
		1768	Nathaniel Merrill	r. 1774					
			Samuel Wood						
	Bradford						217		1 8 6
	Campbell's gore						120		12 10
1774	Deering						928		4 13 4
1751	Derryfield					285	362		2 10 4
	— Gore						30		
1765	Dunbarton	1789	Walter Harris			497	917		5 17 5
1746	Dunstable	1739	Josiah Swan			705	632		5 3 2
		1767	Josiah Goodhue	r.					
			Joseph Kidder						
1763	Duxbury					83	169		1 3 6
	Fishersfield					130	331		2 1 1
1772	Frances Town	1790	Moses Bradford			200	982		5 2 2

First called Dantzick, joined with Sutton in the enumeration of 1775.

COUNTY OF HILLSBOROUGH.

Towns.		Ministers.		Numbers.			Proportion of		Historical and topographical.	
incor- porat- ed.	names.	set- tled.	names.	died or removed. ad.	age.	1775	lost in war.	Taxes to \$ 1000	Remarks.	
1761	Goffs Town	1771	Joseph Currier	r. 1774		831	12	s. 7 s. 8 d. 7	{ These three townships with Antrim, were reckoned to- gether in the enumeration of 1775 and 367 was the total. Indian name <i>Nisittist</i> . First granted by Massachusetts.	
1779	Hancock	1781	Cornelius Waters							
	Henniker	1791	Reed Page							
1772	Hillsborough	1769	Jacob Rice	r. 1782		367		2 11 6		
1746	Holles	1778	Jonathan Barnes			1127		6 8 3		
1765	Hopkinton	1743	Daniel Emerson			798		4 9 4		
		1757	Stephen Scales	r. 1770		1255		9		
		1773	Elijah Fletcher	-1786		1085		12 19 7		
		1789	Jacob Cramm							
1749	Kysarge-gore									
	Litchfield	1765	Samuel Cotton	r. 1731		284		3		
			John Rand					10 6 4		
1764	Lyndeborough	1768	Sewall Goodridge			713		8 11 3		
1768	Mason	1772	Jonathan Searle	r.		501		6 2 8		
		1790	Ebenezer Hill							
	B.		William Eliot							
1746	Merrimack	1772	Jacob Burnap			606		5 12 5		
1763	New-Boston P.	1768	Solomon Moore			569		7 5 9		
1760	New-Ipswich	1760	Stephen Farrar			960		9 14 7		
1778	New London B.		Job Seamans			311		2 11 6		
								first called Heidelberg.		

first called Heidelberg.

COUNTY OF HILLSBOROUGH.

Towns.		Ministers.		Numbers.				Proportion of		Historical and topographical	
incorporated.	names.	settled.	names.	dated or removed.	age.	1775	1790	lost in war.	Taxes to £. 1000	Remarks.	
1746	Nottingham-west P.	1737	Nathaniel Merrill	c. 1782		649	1064		£. s. d. 7 10 3		
1760	Peterborough P.	1772	John Surickland			546	861		7 7		
		1759	John Morrison	p. 1773		107			1 18 10	* joined with Mason in the enumeration of 1775.	
		1779	David Annan			498	1372		1 19 4		
1760	Peterboroughslip					177	319		10 4 9		
1768	Salisbury	1773	Jonathan Searle	r. 1790		177	520		1 4 10		
	Society land					491	747		2 10 10	first called Perry's town,	
1784	Sutton	1782	Samuel Ambrose			262	863		4 18 7	joined with Fishersfield in the enumeration of 1775.	
1768	Temple	1771	Samuel Webster	1778	35	837	1924		4 18 7	First called Almsbury.	
		1779	Noah Miles						12 17 7		
1774	Warner	1772	William Kelley			623	1105	21	7 19 9		
1764	Weare	1789	Amos Wood						5 9		
	B.										
1762	Wilton	1763	Jonathan Livermore	r. 1777							
		1778	Abel Fiske								
	Land between Peterborough and Lyndeborough.										

LITERARY ACADEMIES.

Date of Institution.	Towns.	Value of Funds.	Names of Professors.	Boarding per week.	Tuition per week.
1789	New-Ipswich	L. 1000	John Hubbard	5s.	1s.
1790	Amherst	L. 800	Daniel Staniford	5s.	1s.

COUNTY OF CHESHIRE.

Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical	
incorporated.	names.	settled.	names.	died or removed.	age.	1775	lost in war.	Taxes to £. 1000	Remarks.
1766	Acworth	1789	Thomas Archibald					£. s. d. 3 15 10	
1763	Alstead	1781	Jacob Mann			317	704	6 18 5	
		1789	Levi Lankton						
			Samuel Mead						
1753	CHARLESTOWN		John Dennis			594	1093	8 11 8	first granted by Massachusetts and called Number four.
		1760	Bulkley Olcott						
1752	Chesterfield	1772	Abraham Wood			874	1905	11 16 7	
1764	Claremont	1772	George Wheaton		22	523	1435	9 3	
		1774	Augustine Hibbard						
	E.		Ranna Cossit						
1763	Cornish	1768	James Welman			309	982	5 17	
1763	Croydon	1788	Jacob Haven			143	537	4 13 7	
1771	Dublin	1772	Joseph Farrar			305	901	5 8 6	
		1777	Edward Sprague						
1773	Fitzwilliam*	1771	Benjamin Brigham				1038	5 17 10	*joined with Swansey in the enumeration of 1775.
1753	Hinsdale	1763	Bunker Gay					3 1 9	joined with Chesterfield in do.
1763	Gilsum					178	298	1 15 7	
1773	Jaffrey					331	1235	7 12 5	
1753	KEENE	1782	Laban Ainsworth			756	1314	9 19 6	first granted by Massachusetts and called Upper Ashuelot.
		1738	Jacob Bacon						

COUNTY OF CHESHIRE.

NEW-HAMPSHIRE.

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Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical	
incor- porat- ed.	names.	set- tled.	names.	did or remov- ed.	age.	1775	lost 1790 in war.	Taxes to £. 1000	Remarks.
1737	Langdon	1753	Ezra Carpenter	r.	1772			£. s. d.	
1761	Lempster	1761	Clement Sumner	r.				1 11	
1776	Marlborough	1778	Elias Fisher			128	244	3 1 10	
1761	Marlow B.	1778	Joseph Cumming	r.	1780	322	786	4 17 2	
1761	N. Grantham		Eleazer Beckwith			207	313	1 18	
1761	Newport					74	333	1 16 10	
1774	Packersfield	1781	John Ramele	r.	1791	157	780	4 18 1	
1761	Plainfield		Jacob Foster	r.		186	721	4 3	
1769	Protectworth		—Carpenter			308	1024	5 17 3	
1752	Richmond B.					210		1 13 10	
			Maturin Bellow			864	1380	8 7 4	
1768	Rindge		—Aldrich						
		1765	Seth Deane	r.	1780	542	1143	7 14 7	
1774	Stoddard	1782	Seth Payson						
1769	Surry		—Dalling	r.	1788	224	701	3 8 1	first called Limerick.
	Sullivan					215	448	3 12	
1753	Swansey		Timothy Harrington	r.		647	1157	1 10 8	
		1753	Ezra Carpenter	r.				8 13 10	granted by Massachusetts and called Lower Ashuelot.

COUNTY OF CHESHIRE.

Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical		
incorporated.	names.	settled.	names.	did or removed.	age.	1775	1790	lost in war.	Taxes to £1000	Remarks.
1764	Unity	1769	Edward Goddard			146	538		5. s. d.	
	Walpole		Leavitt	r.					2 18 10	
1752		1767	Thomas Fessenden			658	1245		9 4 11	
1776	Washington	1779	George Lesslie			163	545		3 3	first called Cambden.
1784	Wendwell B.		Nemiah Woodward			65	267		1 9 8	first called Saville.
1752	Westmoreland	1764	William Goddard	r.		758	2018		10 4 11	
	B.		Ebenezer Bailey							
	B.		Joseph Ashley							
1753	Winchester	1764	Micah Lawrence	r.		7238	1209		9 8 4	
		1788	Ezra Conant							

LITERARY ACADEMY.

Instituted.	Town	Value of funds.	Preceptor.	Boarding per week.	Tuition.
1791	Charlestown		Lemuel Hedge	4s. for Children. 6s. for Adults.	2 dollars per quarter.

COUNTY OF GRAFTON.

NEW-HAMPSHIRE.

241

Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical	
incorporated.	names.	set-tled.	names.	died or removed.	1775	1790	lost in war.	Taxes to £. 1000	Remarks.
1782	Alexandria		Enech Whipple		137	298		2 1 3	
1790	Bartlett					248			
1769	Bath				144	495		2 11 11	
	Bridgewater.					281		1 17 2	
1766	Burton					141		13 6	
1773	Cambridge							10 3	
1761	Campton				190	395		3 6 10	
1761	Canaan		—Church		67	483		2 6 2	
1767	Chatham		Thomas Baldwin	d. 1796		58		8 1	
1770	Cockburne				14	26		10 3	
1766	Cockermouth				118	375		2 11 6	
1770	Colburne		Thomas Page		4	29		10 3	
1764	Coventry					80		15 6	
1784	Dalton				50	14		10 3	first called Apthorpe.
1772	Dartmouth				4	111		10 3	
1761	Dorchester					175		1 2 5	joined with Lime in the enumeration of 1775.
1773	Dummer							10 3	
1761	Enfield				50	724		4 8	first called Relhan.
1774	Errol							10 3	
1763	Fairfield							10 3	first called Peeling.

COUNTY OF GRAFTON.

Towns.		Ministers.		Numbers.		Proportion of		Historical and topographical	
incorporated.	names.	settled.	names.	died or removed.	age.	1775	lost in war.	Taxes to £. 1000	Remarks.
1764	Franconia					29	72	£. 12 10	
1778	Grafton B.		Oliver Williams	1790	36	403		2	called Morristown.
1768	Gunthwaite		Eden Boroughs			47	147	2	now called New Concord.
1761	Hanover		Samuel Collins			484	1380	6 1 3	
1769	Dartm. College		John Smith						
1763	HAVERHILL	1765	Peter Powers	r. 1784		365	552	1 4 10 4	called Lower Cohos.
1761	Holderness E. B.		Robert Fowle			172	329	2 3 10	
			Jeremiah Ward						
1774	Kilkenny							10 5	
1763	Lancaster					61	161	13 1	called Upper Cohos.
1774	Landaff	B.	Stephen Royce			40	292	1 12 4	
1761	Lebanon	1772	Josiah Potter			347	1180	6 4 4	
		B.	Jedediah Hibbard						
1761	Lime	1773	William Conant			252	816	7 3 17 9	
1764	Lincoln						22	10 3	
1784	Littleton						96	1 7 7	part of Apthorpe.
1761	Lyman						202	1 5 9	
1774	Millsfield								
1778	New Chester					196	312	2 8	
1779	Northumberland					57	117	10 3	called Upper Cohos.

COUNTY OF GRAFTON.

Towns.	Ministers.	Numbers.	Proportion of	Historical and topographical				
incorporated.	names.	set- tled.	died or removed.	1775	1790	lost in war.	Taxes to £. 1000	Remarks.
1769 Orange	{ 1771 Obadiah Noble	{	r. 1777	131	£. 18 3	s. 3	first called Cardigan.	
1761 Orford	{ 1787 John Sawyer	{		222	540	3 5 6		
1774 Percy	John Richards			168	48	10 3		
1764 Piermont	Nathan Ward			382	426	2 16 6		
1763 PLYMOUTH	Thomas Niles		r.	237	625	5 6		
1767 Rumney	Cotton Haynes			35	411	3 16		
1769 Shelburne	{ Experience Esterbrook			41	10 3	10 3		
1770 (addition)	{ Noah Worcester.			117	10 3	10 3		
1773 Stratford				385	2 8 10	2 8 10	* joined with the Pier-	
1773 Success				206	1 8 5	1 8 5	mont in the enumer-	
1781 Thornton				241	1 8 5	1 8 5	ation of 1775.	
1769 Trecothick				94	1 8 5	1 8 5	joined with Orford	
1763 Warren*					£. 883 10 1 10		in ditto.	
1766 Wentworth								
Locations 17.								

The principal denominations of christians in this State are five, viz. Congregationalists, Presbyterians, Episcopalians, Baptists and Quakers. The distinguishing characteristics of these are so well known that a particular description is needless ;* the comparative numbers of each may be seen by an inspection of the preceding table ; in which the Presbyterians are marked by the letter P. the Episcopalians by E. the Baptists by B. the Quakers by Q. Those without any mark are Congregationalists ; which is the most numerous denomination in this as well as in the neighbouring States of Massachusetts and Connecticut.

In the town of Portsmouth there is a society of Sandemanians and another of Universalists ; which are not noted in the table.

The people in general throughout the State are professors of the christian religion in some form or other. There is, however, a sort of *wise men*, who pretend to reject it ; but they have not yet been able to substitute a better in its place.

It has been a common practice, in all the grants of townships, which have been made either by the Crown or the Masonian proprietors, to reserve one share, equal to that of any other grantee, for the first settled minister, as his own right ; besides a parsonage lot. This has proved a great encouragement to the settlement of ministers in the new towns ; and it has been generally observed that those towns are the most thriving, in which early care has been taken to settle a prudent minister, and assist him in clearing and cultivating his land.

In some of the new towns, where the people are not able to support ministers, it has been usual for the clergymen of the elder towns to make itinerant

* For an account of these distinctions see a "view of religions" by H. ADAMS, lately reprinted in Boston.

excursions, of several weeks, to preach and baptize ; whilst their places at home have been filled, by the neighbouring ministers in rotation. Such itinerations are always acceptable, to the scattered people in the wilderness, and serve to keep up a sense of religion in their families. By the constitution of the State every denomination of christians is equally under the protection of the law, and it is expressly provided, that ‘ no subordination of any one sect or denomination to another, shall ever be established by law.’

It is also claimed and allowed as a right of the people, to elect and support their own teachers ; and that ‘ no person of any one particular religious sect or denomination shall ever be compelled to pay toward the support of the teachers of any other sect or denomination.’ There is therefore as entire religious liberty in New-Hampshire, as any people can rationally desire.

C H A P. XVIII.

Conclusion. Hints of Advice on several important Subjects.

CITIZENS OF NEW-HAMPSHIRE,

HAVING spent above twenty years of my life with you, and passed through various scenes of peace and war within that time ; being personally acquainted with many of you, both in your public and private characters ; and having an earnest desire to promote your true interest, I trust you will not think me altogether unqualified to give you a few hints by way of advice. You are certainly a rising State ; your numbers are rapidly increasing ; and your importance in the political scale will be augmented, in proportion to your improving the natural advantages which your situation affords you, and to your cultivating the intellectual and moral powers of yourselves and your children.

The first article on which I would open my mind to you is that of *education*. Nature has been as bountiful to you as to any other people, in giving your children genius and capacity ; it is then your duty and your interest to cultivate their capacities and render them serviceable to themselves and the community. It was the saying of a great orator and statesman of antiquity,* that ‘ the loss which the Commonwealth sustains, by a want of education, is like the loss which the year would suffer by the destruction of the spring.’ If the bud be blasted the tree will yield no fruit. If the springing corn be cut down, there will be no harvest. So if the youth be ruined through a fault in their education,

* PERICLES of Athens.

the community sustains a loss which cannot be repaired ; ‘ for it is too late to correct them when ‘ they are spoiled.’ Notwithstanding the care of your Legislators in enacting laws, and enforcing them by severe penalties ; notwithstanding the wise and liberal provision which is made by some towns, and some private gentlemen in the State ; yet there is still in many places ‘ a great and criminal neglect ‘ of education.’ You are indeed in a very considerable degree better, in this respect, than in the time of the late war ; but yet much remains to be done. Great care ought to be taken, not only to provide a support for instructors of children and youth ; but to be attentive in the choice of instructors ; to see that they be men of good understanding, learning and morals ; that they teach by their example as well as by their precepts ; that they govern themselves, and teach their pupils the art of self-government.

Another source of improvement which I beg leave to recommend, is the establishment of *social libraries*. This is the easiest, the cheapest and most effectual mode of diffusing knowledge among the people. For the sum of six or eight dollars at once, and a small annual payment beside, a man may be supplied with the means of literary improvement, during his life, and his children may inherit the blessing. A few neighbours joined together in setting up a library, and placing it under the care of some suitable person, with a very few regulations, to prevent carelessness and waste, may render the most essential service to themselves and to the community. Books may be much better preserved in this way, than if they belonged to individuals ; and there is an advantage in the social intercourse of persons who have read the same books, by their conversing on the subjects which have occurred in their

reading and communicating their observations one to another.

From this mutual intercourse another advantage may arise ; for the persons who are thus associated may not only acquire but *originate* knowledge. By studying nature and the sciences, by practising arts, agriculture and manufactures, at the same time that they improve their minds in reading, they may be led to discoveries and improvements, original and beneficial ; and being already formed into society, they may diffuse their knowledge, ripen their plans, correct their mistakes, and promote the cause of science and humanity in a very considerable degree.

The book of nature is always open to our view, and we may study it at our leisure ;

‘ *’Tis elder scripture, writ by God’s own hand.*’

The earth, the air, the sea, the rivers, the mountains, the rocks, the caverns, the animal and vegetable tribes are fraught with instruction. Nature is not half explored ; and in what is partly known there are many mysteries, which time, observation and experience must unfold. Every social library should be furnished with books of natural philosophy, botany, zoology, chymistry, husbandry, geography and astronomy ; that inquiring minds may be directed in their inquiries ; that they may see what is known and what still remains to be discovered ; and that they may employ their leisure and their various opportunities in endeavouring to add to the stock of science, and thus enrich the world with their observations and improvements.

Permit me also to give you some hints in *rural economy*. Your lands often suffer for want of manure, when you have vast quantities provided by the bountiful hand of nature. The mixing of soils, and the draining of bogs might yield immense profit. The labour, though formidable at first view, yet, be-

ing resolutely entered upon and pursued, will be as satisfactory, as the effects will be lasting and beneficial. You have in many places great quantities of marle which will enrich your land for ages ; your swamp mud, carried up to the higher and lighter ground, and mixed with the dung of cattle, would increase your quantity of manure in a most surprising degree. Many of you I presume have yet to learn, that a great part of the nutriment of vegetable substances, is derived from the air, and that the soil itself is enriched by that means. When you lay down your worn out lands, if you sow them with clover or other grasses, they will be sooner recruited than if you leave them to bear only the weeds, which may accidentally spring up ; and if you plough in the green crop, you will promote their fertility, in a much greater degree.

The tow which is made by the dressing of flax, and which children are indulged in burning for their diversion, would furnish the paper-mills with useful materials ; and the skins of sheep and lambs which are often thrown away, would contribute to the manufacture of wool-cards and the binding of books. By an attention to such comparatively small matters, great savings might be made, and various kinds of artificers might be supplied with the means of carrying on their respective occupations.

Suffer me to add a few words on the use of spiritous liquor, that bane of society, that destroyer of health, morals and property. Nature indeed has furnished her vegetable productions with spirit ; but she has so combined it with other substances, that unless her work be tortured by fire, the spirit is not separated, and cannot prove pernicious. Why should this force be put on nature, to make her yield a noxious draught, when all her original pre-

parations are salutary? The juice of the apple, the fermentation of barley, and the decoction of spruce are amply sufficient for the refreshment of man, let his labor be ever so severe, and his perspiration ever so expensive. Our forefathers for many years after the settlement of the country, knew not the use of distilled spirits. Malt was imported from England, and wine from the western or Canary islands, with which they were refreshed, before their own fields and orchards yielded them a supply. An expedition was once undertaken against a nation of Indians,* when there was but one pint of strong water (as it was then called) in the whole army, and that was reserved for the sick; yet no complaint was made for want of refreshment. Could we but return to the primitive manners of our ancestors in this respect, we should be free from many of the disorders, both of body and mind which are now experienced. The disuse of ardent spirits would also tend to abolish the infamous traffic in slaves, by whose labour this baneful material is procured.

Divine Providence seems to be preparing the way for the destruction of that detestable commerce. The insurrections of the blacks in the West-Indies have already spread desolation over the most fertile plantations, and greatly raised the price of those commodities which we have been used to import from thence. If we could check the consumption of distilled spirits, and enter with vigour into the manufacture of maple sugars, of which our forests would afford an ample supply, the demand for West-India productions might be diminished; the plantations in the islands would not need fresh recruits from Africa; the planters would treat with humanity their remaining blacks, and render them

* The Pequods, in 1682

sufficiently prolific to supply them with a succession of labourers ; the market for slaves would become less inviting ; and the navigation, which is now employed in the most pernicious species of commerce which ever disgraced humanity, would be turned into some other channel.

Were I to form a picture of happy society, it would be a town consisting of a due mixture of hills, valleys and streams of water : The land well fenced and cultivated ; the roads and bridges in good repair ; a decent inn for the refreshment of travellers, and for public entertainments : The inhabitants mostly husbandmen ; their wives and daughters domestic manufacturers ; a suitable proportion of handicraft workmen, and two or three traders ; a physician and lawyer, each of whom should have a farm for his support. A clergyman of any denomination, which should be agreeable to the majority, a man of good understanding, of a candid disposition and exemplary morals ; not a metaphysical, nor a polemic, but a serious and practical preacher. A school master who should understand his business and teach his pupils to govern themselves. A social library, annually increasing, and under good regulation. A club of sensible men, seeking mutual improvement. A decent musical society. No intriguing politician, horse jockey, gambler or sot ; but all such characters treated with contempt. Such a situation may be considered as the most favourable to social happiness of any which this world can afford.

APPENDIX.

No. I.

An original Letter of Doctor COTTON MATHER to GEORGE VAUGHAN, Esq. agent for New-Hampshire in England ; relating to Wheleright's Indian deed. Vol. I. p. 10.

Sd. 1 mo. 1708.

SIR,

YOU demand my thoughts upon the date of the instrument in which the Indian Sachems of Pascataqua convey to Mr. Whelewright and his friends the country, whereof your people are the present possessors. 'How a date in the year '1629 could consist with the true time of Mr. 'Wheleright's coming into this country?'

I cannot but admire at the providence of Heaven, which has all along strangely interposed, with most admirable dispensations, and particularly with strange mortalities, to stop the proceedings of the controversy about Mason's claim upon you, just in the most critical moment of it.* There seems to have been as remarkable a display and instance of that Providence, in the finding of this instrument just before the sitting of your last court, about this affair; and after it had been, for very many years, discoursed of among the good men who knew of such an instrument; but with regret concluded it lost and gone beyond all recovery.

I suppose you are making your application to those, who will be far from the opinion that dominion is founded in grace. Titles to lands are not more or less valid according to the profession of

* Referring to the death of Robert Mason in 1688, and of Samuel Allen in 1705.

Christianity in the owners. There is no protestant but what will acknowledge that *pagans have titles that are incontestable*, and that they have not, by their paganism, forfeited their titles to the first christians that shall therefore pretend to them.

Let the date of Whelewright's instrument be what it will, there seems to be an instrument of some such importance on Mason's part, necessary to render Mason's claim effectual.

When the Kings of England have given patents for American lands unto their subjects, their virtue and justice has been such, that they have not therein designed ever to give away the properties of the natives here ; but always intended that their subjects here should *honestly agree with the natives*, for what lands they should get under the protection of these patents, before they should call them their own. Briefly, you expect a decision of your case, where Indian titles will have a due consideration.

I confess when I was first informed of the date which your instrument bears, I thought that it must be a forgery, but I must now give you my second thoughts upon it.

The very aged gentlewomen, his two daughters, I look upon as very incompetent witnesses to determine the time of their father's *first* coming over into America. I have discoursed with the more sensible and capable of them, namely, Mrs. Pierfon, who tells me that her father's coming over *with his family* was in the same ship with Mr. Samuel Whiting, the minister of Lynn, and others, who, we are all sure, came in the year 1686,* but she tells me she is not sure her father never visited America before, only she does not remember she ever heard him speak of it. And yet there are shrewd indica-

* Mr. *Whelewright* is first mentioned in Winthrop's journal in 1636, as *brother* to the famous *Anna Hutchinson*, the patroness of Antinomian tenets.

tions of the gentleman's being here, before the year which they tell us of ; I suppose you are furnished with them.

Your instrument cannot be invalidated, but by some demonstration that Mr. Wheleright was at home in Lincolnshire, all the year 1629. We know there were many voyages taken, between England and these parts of America, before that year. In the year 1624, we find Mr. Roger Conant managing a plantation, very little to the southward of Pascataqua. It is no improbable thing, that such an active and lively man as Mr. Whelewright, might step over hither to see how the land lay, before his transportation of his family.*

The instrument of 1629, has upon it such irrefragable marks of antiquity, that if it be a forgery, it must be a very ancient one. It has almost as many marks of 1629 as there be years in the number, of which you need no recitation of mine ; you are much better able than I am, to amplify upon them.

About an hundred and twenty years ago, there were found certain manuscripts, in some vaults, near Granada, in Spain, which, it was affirmed, were fifteen hundred years old ; and they sang *te deum* for the discovery. But the Dominicans presently discovered them, from the language and the intent of them, to be a modern fraud of the Franciscans. All the wit of man cannot perceive the least symptom of a modern fraud in your instrument. The gentleman who lit upon it, is as honest, upright and pious a man as any in the world, and would not do an ill thing to gain a world. But the circumstances of the instrument itself, also, are such, that it could not be lately counterfeited. If it were a forgery, Mr. Whelewright himself must be privy

* See Vol. I. Appendix p. ix.

to it. But he was always a gentleman of the most unspotted morals imaginable ; a man of a most unblemished reputation. He would sooner have undergone martyrdom, than have given the least connivance to any forgery.

There was a time, in the year 1637, when he was persecuted with too much violence, in the Massachusetts Colony, but it was only for a disturbance made about certain speculations, which were thought to be of an antinomian tendency. His worst enemies never looked on him as chargeable with the least ill practices.

The blinding heat of those troubles procured an order for his remove out of the colony. 'Tis remarked in the books then published, that he did not go to Rhode-Island, the most inviting part of the country, whither all they went who were censured at the same time with him. No, he removed then into Hampshire, which would invite one to think that he had a peculiar interest in that Province.

I have heard, that when he was a young spark at the University, he was noted for a more than ordinary stroke at wrestling ; and that afterward waiting on *Cromwell*, with whom he had been contemporary at the University, Cromwell declared to the gentlemen then about him 'that he could remember
' the time when he had been more afraid of meeting Whelewright at football, than of meeting any
' army since in the field ; for he was infallibly sure
' of being *tript up* by him.'

I know not whether the instrument of his now, in your hands, will have as good an efficacy as the owner had. You will doubtless think it has, if, in wrestling with your adversaries, it *trip up* their cause, and give them a fall. I should abhor, that the cause of my best friends, and a very good cause, ever should be served by any indirect means ; yet

I verily think this instrument ought very much to be considered, and to have a very great weight allowed unto it.

Sir, I wish you a good voyage, and a good issue, and subscribe,

Your sincere servant,

CO. MATHER.

P. S. I forgot to tell you that when my parent lay at Plymouth, bound for New-England, on March 24, 1691-2, Mr. Sherwell, a minister then living there, told him that his grandfather and one Mr. Coleman and another, had a patent for that which Mr. Mafon pretended unto at Pascataqua. You may do well to inquire further concerning it.

No. II.

*Lieut. Governor VAUGHAN'S Speech at the Council Board; Sept. 24, 1717.
(Vol. II. p. 22.)*

GENTLEMEN,

YOU cannot but believe that I am informed of many things spoken to my prejudice. When private whispers, defamatory to me are handed forward, I pass them over with flight and disregard, and believe that every thing hitherto designed against me has turned to my advantage, and will still do so. But when matters are carried farther, wherein the honor of the Crown, and the interest of the King's Majesty is especially struck at; when revenge's mother utters bold challenges, raiseth batteries, and begins to cannonade the powers established by my sovereign, I acknowledge myself alarmed, which I shall in no wise tolerate or endure; as I am honored of the King, I will do my utmost to sup-

port it, and not let his commission be vilified at the rate some will have it. To have a due deference paid to it, is what the King requires and expects, especially from his ministers ; and to have them studious of lessening the authority therein granted, is an aggravated fault, and I cannot but wonder at the arrogance and pride of those who do not consider I am a superior match, as being armed with power from my Prince, *who doth execution at the utterance* of a word, and I hope none will be so sturdy as to dispute it. If I soar too high, the fall will not crush them : If they run too fast, their repentance may be timely. What I have to say to you, Mr. Penhallow, is in gross, and is, that your business, for a long time, has been to sow discord in the Commonwealth, and your endeavours to propagate confusion and difference in each town within the government ; when avowed principles oblige you to fodder, as much as in you lies, the affections of magistrates and people, thereby to divert all things which naturally produce dissensions, tumult and feuds, the particulars I have, and shall transmit to my Lord the King, in whose name, and by virtue of whose power, I *suspend* you, Samuel Penhallow, from sitting, voting, and assisting at the Council Board, till his Majesty's pleasure shall be known.

No. III.

An original Letter from Sir WILLIAM ASHURST to Dr. INCREASE MATHER,

REV. SIR,

I HAVE your letter of 12th August last, which I would have sooner answered, but that I understood that there has no ship gone to you this winter. I am pleased at what you write of your

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Lieutenant Governor, that he acquits himself worthily, and is a friend to the civil and ecclesiastical constitution. I assure you, if I had not known this to be his character (not from your agent, but from other impartial and disinterested hands) you had never seen him in that station. I have no personal disrespect to Col. *Tailer* ; on the other hand I wish him in his private capacity much happiness and prosperity for his deceased uncle's sake, whose memory I esteem and value ; but when the interest and welfare of the public is before me, I never suffer myself to be influenced by any partial considerations ; and who can think it proper, that the second post in the government should be filled by one who not content with dissenting from the established churches by his constant practice, did engage, at the head of a party in a concerted design, to subvert their foundations ?

I do not know but such a procedure may recommend him to some people, but it must needs disqualify him to you and me, who know on what principles New-England was first settled, and what were the pious motives which prevailed on the first planters to forsake their native land, and plant a wilderness.

I hope I have done as well, in getting the *Lieut. Governor of New-Hampshire* displaced, who presented a memorial, when he was here, to the King and ministry, to bring New-England into the land tax of Great-Britain, and proposed, that a receiver should be appointed by the Crown, to gather in the money. For a native of New-England to be the author of such a memorial, is a monstrous offence ; and if you suffer such people to be easy among you, yet they shall never escape my resentment while I have any interest or power at Court.

I am very glad that you are still useful in your advanced age. To preach constantly at fourscore,

and to so large an audience, and without notes, is a rare example, and scarcely to be found in history. For myself, I am ten years short of you, yet I think I have great acknowledgments to make to divine Providence, for the measure of health I enjoy, and the opportunities I have of being yet serviceable in several stations. I constantly attend at the excise office, where I have the honor to sit as a commissioner, and at the court of aldermen, where I am the senior in rank, though not in years. Besides these employments I have vacant hours for the service of my country in general, and my friends in particular; but I can tell you with a great deal of truth that *no part of my life has given me more satisfaction than that wherein I have served the interest of New-England*, especially my favourite work, the propagation of the gospel among the natives, in which disposition I hope I shall continue to my life's end.

I refer you to the prints for public news. You'll hear various reports about the unhappy divisions in the royal family; which all good men are sorry for. I have nothing to say upon that subject, only that the King acts in every thing with a prudent and steady resolution becoming the character of a great and wise prince.

I am, Sir, your affectionate friend,
and servant,

W. ASHURST.

London, March 10, 1717-18.

No. IV.

The humble Apology of the People of Nutfield to his Excellency SAMUEL SHUTE, General, Governor and Commander in Chief of his Majesty's Provinces of the Massachusetts Bay and New-Hampshire in New-England.

May it please your Excellency,

THE subscribers having seen a copy of your Excellency's letter to Captain White and Captain Kimbell, find themselves under a necessity of vindicating themselves from the charges given in against them; it being allowable by the law of nature and of nations, to the greatest criminals to defend themselves when they justly plead in their own vindication. We were surpris'd to hear ourselves termed *Irish people* when we so frequently ventured our all for the British crown and liberties against the Irish papists, and gave all tests of our loyalty which the government of Ireland required, and are always ready to do the same here when demanded. Though we settled at Nutfield, yet we used no violence in the manner of our settlement, seeing no body in the least offered to hinder us, to set down in a desolate wilderness; and we were so far from hindering the English that really had a mind to plant with us, that many of them are now incorporated with us. After our settlement we found that two or three different parties claimed Nutfield, by virtue of Indian deeds, and we were given to understand, that it was necessary for us to *hold the soil by some right purchased from the natives*. Accordingly we made application to the Hon. Col. Wheelwright of Wells, and obtained his Indian right; which we have to shew. His deed being of ninety years standing, and conveyed from the chief

Sagamores between the rivers of Merrimack and Pascataqua, with the consent of the whole tribes of the Indian nation, and well executed, is the most authentic we have seen ; and the subscribers could not in reason think that a deed which is not twenty years old, of land which is not sufficiently butted and bounded, from an obscure Indian, could give any right to land which had been sold so many years before, by the right owners. And the subscribers hope they will be excused from giving away so good a title, for others that cannot pretend rationally to be so well supported ; and which they always refused to warrantee and make good against other claims. The dutiful applications which we have made to both courts, if we be incorporated, in whatsoever province we fall to be, will witness for our respect to his Majesty's government. If affidavits have been given against one of our number as using some threatening expressions, we hope it will not be imputed to the community. If our accusers be permitted to come up in troops, as they have done and violently demolished one of our houses, and destroyed part of our hay, and threatened and insulted us with impunity, to the great terror of our wives and children, when we suffered patiently, and then accuse us to our rulers of violence, injustice, fraud, force, insolence, cruelty, dishonour of his Majesty's government, and disturbance of his Majesty's subjects, injuries and offences to the English, and the like, when we know ourselves to be innocent, we think it hard measure ; and must have recourse to God, who forbiddeth to take up a bad report against our neighbour, and will, we hope, bring forth our righteousness as the light, and our judgment as the noon day. If we be guilty of these disorders, we know we are liable to a legal trial, and are not so weak as to suppose ourselves to be out of the reach

of your Excellency's government. The subscribers hope that if any other accusations come in against them, they will be allowed an equal hearing before they be condemned; and as we enjoy the liberty of the gospel here, which is so great a mercy, shall improve it, for God's glory; and as he has taught us, be dutiful to his Majesty's government, set over us, and, if possible, live peaceably with all men, shall be desirous of peaceable neighbours, that want to settle with us, and to help us to subdue a part of this vast and uncultivated wilderness; and shall not cease to pray for the divine blessing on your Excellency's person and government.

Done at Nutfield, Feb. 27, 1719-20, and

subscribed by

JAMES M'GREGORE, &c.

No. V.

An original Letter of Governor SHUTE to Mr. PENHALLOW.

Boston, Feb. 2, 1718-19.

SIR,

DR. COOKE having again over his cups treated me very scandalously, I have complained to the council who I don't question will do me justice.

It will be of service to me to have a certificate to shew *how drunk he was* that night that he and Col. Goff broke into our company at young Gerrish's, for I remember that you and Mr. Bridger told me that he stay'd so long after we were gone, as to get *so drunk that he cou'd neither go nor stand*; if this be strongly certified, I believe it will give him a good lift. Pray my service to the Lieut. Governor, the council and your family.

I am, Sir, your humble servant,

SAMUEL SHUTE,

No. VI.

To his Excellency JONATHAN BELCHER, Esq. Captain General and Commander in Chief in and over his Majesty's Province of New-Hampshire in New-England. To the Honourable the Council and Representatives in General Court assembled, The Complaint and Petition of HUGH ADAMS, Clerk, the Gospel Minister and Pastor of the Church at Durham within said Province,

HUMBLY SHEWETH,

FORASMUCH as your complainant petitioner hath been more than one and twenty years last past a labourer in the word and doctrine of Christ sincerely to the utmost of his ability amongst that people, although the good laws of this said province so far have required of them ; and their own contract or agreement with him, voted by them in the first week of the month of April, anno 1717, as by a copy of the record of Oyster river parish or said town, as also by the evidences of some of their then select men and committee may appear in order for his support, with a competent salary of one hundred and four pounds during his ministry there, even then when silver money was not of more value than ten shillings per ounce annually, to be paid as then understood in the real value thereof, and not only in the bare name of so much, and unanimously agreed by their then committee, to be paid punctually each year, one half of said salary, i. e. £52 at the end of or within each six months, i. e. the first week in October and April, with other material articles of said agreement for his maintenance among them, which also hath obliged them thereunto, yet have they not in any one year of said time of three apprenticeships since their said contract, been honest nor faithful by the pay-

ment thereof in the just value, nor in due season, so as that the hire of his ministerial labours so much and long being kept back by their sacrilegious fraud, hath been crying in the ears of Christ the Lord of sabbaoth, so to expose them and their covenant and silent neighbours in this said province, unto the curse denounced which hath been so long and often executed in such a variety of destroying, terrifying and impoverishing judgments of God, too many herein to be enumerated, and so much thereof evidently occasioned by said parish and town, being therein so long tolerated with impunity, as an Achan in the camp ; and as the seven sons of Saul, in the days of King David ; and as Jonah in the ship of the commonwealth of this province aforesaid. And especially whereas the principal article in the said contract insisted on by their said minister, wherein their then select men and committee agreed, by manual vote and voice (*nemine contradicente*) but was not entered by their then parish clerk, John Smith, who deceased anno 1722, with or after the other articles hereof in the record rolls of their then parish of Oyster river, or since town of Durham, and since yearly on very fervent intreaties to have the same articles entered upon their records and observed for the yearly performance thereof for the future, whereunto nevertheless they have been inexorable beyond all reason and justice, hitherto in disregarding said above hinted article, viz. That each year one half of said salary of £104, which is £52, should be paid in to him or his order at or before the end of each six months or half year, i. e. the first week in October and April, which committee vote or vow of theirs, has never yet, in any one year of the twenty-one years of my ministry amongst them, been performed : But mostly deferred until at least three months after said former half

year's harvest was ended, when the price of provisions was raised at least twenty-five per cent. dearer than at harvest or in gathering thereof; which delinquency of theirs in said twenty-one years hath been to the damage of said minister above £520 in said parish and town, especially where he has been necessitated, rather than starve, to borrow considerable sums of money upon six, ten, fifteen and twenty per cent. interest yearly, and running on interest upon interest, yet unto this day, to his impoverishing oppression, and sinking discouragement; and reduced his salary of £104 of late years to the name thereof, when in present value as the altered prices of all necessaries for livelihood are about two hundred per cent. dearer than when their said contract was made. His salary now is scarce more in real worth than £36 each year, although their rateable heads, families, cattle and lands have increased treble their ability more than at first agreement. Also this year, 1738, the majority of said Durham inhabitants have stopped their ears at the cry of the poor at their two publick town meetings, although it is threatened they shall cry themselves but shall not be heard.

Therefore now the oppressing necessities of the complainant petitioner constrain him to pray he may be regarded by this great and General Court assembled in these his following requests, as Christ Jesus Immanuel, to encourage each of his faithful ministers, testifyeth saying, 'He that heareth you, heareth me.'

1. Request that the records of said parish, named Oyfter river, and now chartered town of Durham, may be so far impeached as that the said article may be entered by the present town clerk, Lieut. Samuel Smith; and accordingly that he may be summoned to bring Durham's town-book of rolls,

and likewise Capt. Francis Matthews, the former town clerk, to bring the record rolls of said Oyster river parish if yet in his possession ; and likewise Lieut. Abraham Bennick and Mr. Sampson Doe, then of the selectmen and committee for said parish in that year 1717, to give in or renew their oath or affidavit, each of them for confirming the truth of said article.

2. Request that the petitioner's said salary of £104 may be enacted for the future during the remainder of his ministry in said town, to be made good in full value as really as in name, and to be paid in due season according to the request and article aforesaid, with sufficient penalty for any delinquency thereof, which, as written in the divine law moral, is the fifth part of the principal, to be added unto it as evident from Lev. v. 15, 16. Num. v. 6, 7, 8.

3. Request that delinquency from the payment of any lawful settled minister's salary within said province, may be enacted a criminal case, or matter presentable by any grand juror, upon complaint made to him at each or any court of sessions quarterly, as in the Massachusetts province government, which I perceive by Psalms xli. 1, 2, 3, is the principal reason why they have been hitherto proportionably spared from the *throat pestilence* and other impoverishing, more than New-Hampshire.

4. Request that Daniel Davis of said Durham, may be summoned and judged by this most Honourable Court of New-Hampshire province aforesaid, for his sundry years, trespassing upon and inclosing within his fence and detaining so forcibly from said minister several years previous possession thereof, sundry acres of upland, and salt marsh and thatch bed, belonging to the glebe land or parsonage, possessed by, improved for, as also granted to,

the minister of said parish or town at least sixty years, and for evidence thereof, that Capt. Francis Mathews and his next neighbour Jonathan Willey the eldest, and Joseph Stephens, his son, and William Willey, may each of them be summoned. Moreover the said robbed and defrauded minister prays that it may likewise be ordered, that the select men of said each year may rescue said parsonage land from him the said Daniel Davis and every other unjust incroacher thereon, and on each other parcel of glebe land or parsonage (as viz.) the long marsh and that parcel of ministerial land lying on the highway leading S. and W. toward Lampereel river, and bounded E. and S. on Potter Mason's land, and S. and W. on Richard Denbow's land, each of which is incroached upon by one or other of the adjacent neighbours, and although their minister, as their spiritual father, so long seeking their welfare in gathering of a church first amongst them, on March 26, 1718, his prevailing as the dresser of their church vineyard, with Immanuel Christ Jesus the Lord thereof, for his grant of four years probation, whether the barren fig trees might, by a ministerial husbandry expended on them, be prevailed with to bear fruit proportionably that it might be well with them as in the gospel parable thereof, Luke xiii. 7, 8, 9, and when the Indian war began, anno 1722, and that five persons were cut down thereby, in our parish; who hath likewise prevailed with the heavenly Prince of Peace to make and keep his covenant of peace with and for us as written in Ezekiel xxxiv, 25, yearly pleaded and granted these thirteen years hitherto, notwithstanding the so repeatedly many rumours of wars free from the reality thereof. Likewise in the year 1729, when Captain Samuel Emerson and Lieut. Jonathan Thompson and Hubbard Stevens had harrassed their minister with an antichristian council ecclesi-

astical countenanced by the then Commander in chief, after which the said Emerson and Korite company, by their negative clandestine votes robbed him of the £50 addition to his salary, they granted him the preceding year 1728. In his so provoked subjection to passion, as Elias in James v. 17, 18, he the said minister, while it was yet more than three months to the harvest, prayed it might not rain, and it rained not until three months after ; when in regard to the opportunity of some friendly brethren, he appointed and conscientiously sanctified a church fast, from evening to evening, abstained three meals from *eating, drinking* and *smoking* any thing ; in beginning of September that year 1729 ; and the Lord Christ was pleased to hear in heaven and grant such repeated plentiful and warm rains, as recovered the languishing corn, grass and fruits of the trees, unto a considerable harvest thereof ; so as was then remarkable. And in that year 1733, when the said parish, by the General Court, was chartered into the township of Durham in answer unto their said minister's petition, for its privileges and said name as therein pleaded for, and the inhabitants of said town proceeded by their chosen committee, at their most general meeting, to divide their commons, voting their minister aforesaid, should, as he did draw lots for them all, yet he cannot prevail with the lot layers to survey his lot of twenty-five acres, nor inform him where he may have it laid out for him, neither have said inhabitants fulfilled their condition of honourably supporting their minister. And since no inferior Court in this said province hitherto could do justice to your petitioner, he is therefore now necessitated to flee for refuge to this Supreme Legislative Court of nursing fathers ; in each of which requests, your so long oppressed petitioner importunately asketh for justice, firmly believ-

ing, *after that*, God will be intreated for the land in New-Hampshire.

So complaineth and prayeth the above named petitioner,

HUGH ADAMS.

No. VII.

The opinions of JOHN READ and ROBERT AUCHMUTY, on the case of JOHN TUFTON MASON, 1738.

1629,
Nov. 7. **THE** President and Council established at Plymouth for the planting and governing of New-England, granted to Capt. John Mason, of London, Esq. all that part of the main land in New-England from the middle of Merrimack river, along the sea coast to Pascataqua River, up that river to the farthest head thereof, and from thence north-westward till three score miles be finished from the entrance of Pascataqua river, and from Merrimack through that river to the farthest head thereof, and so forwards up into the land westward, till three score miles be finished, and from thence to cross over land to the three score miles end, accounted from Pascataqua river, together with all the islands within five miles of the premises, with the appurtenances which the said John Mason, with their consent, intended to name New-Hampshire, to hold to the said John Mason and his heirs.

1635, April 22. The president and council aforesaid, grant to the said John Mason, all that part of New-England, from the middle of Naumkege river, along the sea coast, round Cape-Ann to Pascataqua harbour, and up the river Newichawannack, to the farthest head thereof, and from thence north-westward till sixty miles be finished from the entrance of Pascataqua harbour, and from Naumkege through

the river into the land west sixty miles, from which period, to cross over land to the sixty miles end, accounted from Pascataqua aforesaid, and the south half of the Isle of Shoals and all other islands within five leagues of the premises, all to be called New-Hampshire, also another parcel of land lying on the south east side of Sagadahock, at the mouth of the river, containing near ten thousand acres, to be called by the name of Masonia, to hold to him and his heirs.

N. B. Sir William Jones, and Sir F. Winnington, attorney and solicitor-general in their report in favour of Robert Mason, grandson of John Mason, his title to New-Hampshire, mention another grant from said president and council, to Capt. John Mason, dated 9th March, 1620, which I have not seen.

1635, Nov. 26. Capt. John Mason, by his last will, devised to the mayor and commonalty of Kinglynn, two thousand acres of land in his county of New-Hampshire, or manor of Mason hall in New-England, which his executrix and overseer should think most fit. *Item* to his brother-in-law John Wollaston, three thousand acres of land in his county of New-Hampshire or manor of Mason hall, where his said brother and executrix should think fit; to hold to him and his heirs. *Item* to his grandchild Anne Tufton, Masonia, to hold to her and her heirs. *Item* to his grandchild Robert Tufton, his manor of Mason Hall, to hold to him and his heirs, provided he alter his surname, and name himself Mason first. *Item* to John Wollaston aforesaid two thousand acres of land in this county of New-Hampshire, in trust to convey one thousand to some feoffee in trust towards the maintenance of a godly minister in New-Hampshire, and the other thousand to some feoffee towards the maintenance of a free grammar school in New-Hampshire. *Item* to

his grandchild John Tufton, all the rest of his manors, messuages lands, tenements and hereditaments, in his county of New-Hampshire, or elsewhere in New-England, to hold to him and the heirs of his body. Remainder to his cousin Doctor Robert Mason; and the heirs male of his body, and for want of such issue to revert to the donor and his heirs, provided his grandchild John Tufton shall alter his surname, and surname himself Mason; first provided also the said John Tufton shall pay his sister Mary Tufton out of the manors messuages, lands and tenements aforesaid, £500 sterling for her preferment in marriage, &c. and died, and on the second of December following, his will was proved in the prerogative court of Canterbury, and administration granted to Anne, his widow executrix.

1677. John and Anne, grandchildren, died without issue, and their estates came to Robert Tufton Mason, accordingly for whom King Charles II. settled the bound line between New-Hampshire and the Massachusetts Bay, and he died leaving two sons, John and Robert.

1691, *April 27*. John and Robert Tufton Mason bargained and sold to Samuel Allen of London, merchant, for a sum of money, all New-Hampshire, as bounded in their great grandfather's grant of 1635, and Masonia, also part of the province of Main, the country Mariana, province of Laconia, and several towns in New-Hampshire, as heretofore described with the appurtenances, deed and charters thereof, to hold to him and his heirs. Then John died without issue. That Robert Tufton Mason, surviving great grandson of Captain John Mason, lived and died at Portsmouth, of Pascataqua, about forty years ago, leaving his eldest son, John Tufton Mason and several other children; and this John Tufton Mason about twenty years after, died, leaving one only child, John Tufton Mason, of Boston,

mariner, who claims the province of New-Hampshire, and would compound with the province of the Massachusetts Bay all differences between them.

Qu. Upon the whole, what interest hath this John Tufton Mason in New-Hampshire, and to what purpose and effect can the province* agree with him, and in what manner execute it?

Ans. So much as the President and Council aforesaid conveyed to Captain John Mason for New-Hampshire, except the lands southward of Merrimack river, and within three miles of it on the northerly side, which was before conveyed to the inhabitants of the colony of the Massachusetts, and except seven thousand acres particularly devised, and the manor of Mason Hall, the bounds and contents whereof I know not. I say all the rest of New-Hampshire, Captain John Mason, by his will aforesaid, devised to his grandson, John Tufton Mason, in tail, general. Remainder to his grandson, Robert Tufton Mason, in tail general, with remainders over, and the right has properly remained descended, and come to this John Tufton Mason, of Boston, mariner, the alienation of his great uncle and grandfather aforesaid notwithstanding, which could be *of no avail after their death.* But if at their death his father was of full age, it is so many years ago, that his suit is effectually barred by statute 21, James I. chap. xvi. which requires him or his heirs to bring it within twenty years after the title accrued at farthest. And if he ever came of age, he or his heirs could have but ten years after he was of age, or after his death, to bring this suit, which must be elapsed in this time, and their suit intirely barred, for which only reason I am of opinion this Province can neither get nor lose by him and his title aforesaid.

JOHN READ.

* Of Massachusetts.

I conceive the right properly descends to John Tufton Mason, of Boston, mariner, the alienation aforesaid notwithstanding; and am of opinion the statute of limitation aforesaid will not be held of itself to extend to New-England, being an act not affirmative of the common law in abridgment of the general right the party has of pursuing, and beyond twenty years asserting his property, and from the express words of the statute, the same appears to be confined to the realm of England. John Tufton Mason cannot convey but for his life, and not that, being out of possession, till he regains the same. Whatever fruit the province may expect from his title must be by proper powers.

ROBERT AUCHMUTY.

Boston, June 16, 1738.

No. VIII.

Coppy of Queries stated by JEREMY GRIDLEY, Esq. of Boston, and answered by N. FAZAKERLEY, Esq. of London.

Qu. **WHETHER** a *fine sur cognizance*, &c. levied at Westminster, of lands lying in New-England, by fiction, supposed to be in England, will bar the heir in tail by common or statute law?

I am of opinion that the heir in tail will not be barred or affected thereby.

Qu. Whether a common recovery suffered of such lands, will be a bar to the heir in tail? N. B. There was a proper court in the plantation where a fine might have been levied, and a recovery suffered, and the service of the writ in the common recovery was upon the heir in tail then in England.

I think the heir in tail will not be barred or affected thereby.

Qu. Whether such a fine and recovery will bar the heir in tail in a plantation where such heir has a right to the jurisdiction and prerogatives used by the Bishop of Durham in the county palatine of Durham, though he did not exercise his right at that time, and there were courts there under the appointment of the crown?

If the facts relating to this question had been stated, I might have been able to have given a direct answer to this question. However this general answer may probably answer the intent of the question, for I am of opinion that a fine, or recovery, cannot operate upon any real estate or interest lying out of the jurisdiction of the court of common pleas, and consequently cannot bar or affect any estate tail in any foreign colony or plantation. And in my opinion such a law would be of most dangerous consequence to estates in those countries, and introduce great uncertainty and confusion if the estates of the inhabitants were to be affected by records privately made up in this country, which may be laid in one country as well as another.

Qu. Whether any judgments have been given at Westminster, upon the validity and force of such fines and recoveries, and what are they?

I know not that there has been any such judgment; but a few years ago, when the present Lord Chancellor was Chief Justice of the King's Bench, there was a writ of error brought to reverse a fine levied in the common pleas, and the error assigned was that it appeared upon the face of the record, that the lands lay in *partibus transmarinis*, and the defendant in error was so sensible of the objection, that he moved the court of common pleas to amend by striking out the words in *partibus transmarinis*, which put an end to the cause. And I do not know of any other judgment. But as to recoveries, how

can a writ of feizin be awarded or returned ? for the slieriff cannot give feizin of lands out of his Bailiwick.*

N. FAZAKERLEY.

May 21, 1754.

No. IX.

An original Letter from Gov. WENTWORTH to Gov. SHIRLEY.

Portsmouth 22d March, 1754.

SIR,

IT gives me great concern to find by your Excellency's letter of the 18th current, that the intelligencies you have from the eastward, confirm the report of the Fort the French are building on or near Kennebeck river. This part of the French policy, it concerns all his Majesty's colonies to defeat, as the building forts within the undoubted limits of his Majesty's dominions, is not only a violation of all treaties subsisting between his Britannick Majesty and the French King, but has a fatal tendency to disturb the peace and quiet of all his Majesty's colonies on the continent of America, and therefore I shall think it my duty, if I can obtain assistance from the assembly, to prevent not only the building this, but any other fort within the known limits of the King's dominions, after they have been desired and required to desist.

In a postscript of my last letter, I advised your Excellency that the two persons indicted for the murder of two Indians, the grand Jurors had found a bill against, and on Monday they were put in irons, and to remain so until the day appointed for their trial,

* The seizin of the Lands of New-Hampshire, when sold to Samuel Allen, was given by the Sheriff of Kent, in England.

but on Thursday morning about two of the clock, a mob assembled, and with axes and crows broke open, and rent in pieces the outer and inner doors of the prison, and rescued the prisoners, and in so silent a manner, that the neighbouring houses were not disturbed, until the main body had got possession of the prisoners, and then they marched out of town, firing guns, and in a most insolent manner. As to the numbers it is variously reported, some say two hundred, and others three hundred, but it is my opinion, they thought themselves strong enough to resist the town had they been discovered; and it is generally supposed the far greater part of this riotous gang came out of the country, and from the frontiers who will be most exposed, if by their unprecedented conduct it should be the cause of a war; but that a white man should not be hanged for killing an Indian, has taken such deep root in the minds of the unthinking multitude, that it is impossible to remove it.

I convened the council on this occasion, who advised me to issue a proclamation, promising a reward for apprehending the prisoners, but they desired to suspend their advice on the rioters, until the next week, alledging that as there was so great a number concerned, it must be impossible but some discovery must be made in a more easy way; so I have adjourned the consideration thereof until next week, hoping some discovery may be made in the mean time, of some of the leaders.

I am, with the greatest respect,

Sir, your Excellency's most
obedient, humble servant,

B. WENTWORTH.

No. X.

A particular Account of the Captivity of Mrs. JEMIMA HOWE, by the Rev. BUNKER GAY, of Hinsdale, in a letter to the Author.

July 27,
1755.

AS Messrs. Caleb Howe, Hilkiah Grout, and Benjamin Gaffield, who had been hoeing corn in the meadow, west of the river, were returning home, a little before sunset, to a place called Bridgman's Fort, they were fired upon by twelve Indians, who had ambushed their path. Howe was on horseback, with two young lads, his children, behind him. A ball, which broke his thigh, brought him to the ground. His horse ran a few rods and fell likewise, and both the lads were taken. The Indians in their savage manner, coming up to Howe, pierced his body with a spear, tore off his scalp, stuck a hatchet in his head, and left him in this forlorn condition. He was found alive the morning after, by a party of men from Fort Hinsdale; and being asked by one of the party whether he knew him, he answered yes, I know you all. These were his last words, though he did not expire until after his friends had arrived with him at Fort Hinsdale. Grout was so fortunate as to escape unhurt. But Gaffield, in attempting to wade through the river, at a certain place which was indeed fordable at that time, was unfortunately drowned. Flushed with the success they had met with here, the savages went directly to Bridgman's Fort. There was no man in it, and only three women and some children, viz. Mrs. Jemima Howe, Mrs. Submit Grout, and Mrs. Unice Gaffield. Their husbands, I need not mention again, and their feelings at this juncture I will not attempt to

describe. They had heard the enemies guns, but knew not what had happened to their friends. Extremely anxious for their safety, they stood longing to embrace them, until at length, concluding from the noise they heard without that some of them were come, they unbarred the gate in a hurry to receive them ; when lo ! to their inexpressible disappointment and surprise, instead of their husbands, in rushed a number of hedious Indians, to whom they and their tender offspring became an easy prey ; and from whom they had nothing to expect, but either an immediate death, or a long and doleful captivity. The latter of these, by the favor of Providence, turned out to be the lot of these unhappy women and their still more unhappy, because more helpless, children. Mrs. Gaffield had but one, Mrs. Grout had three, and Mrs. Howe seven. The eldest of Mrs. Howe's was eleven years old, and the youngest but six months. The two eldest were daughters, which she had by her first husband, Mr. William Phipps, who was also slain by the Indians, of which, I doubt not but you have seen an account in Mr. Doolittle's history. It was from the mouth of this woman that I lately received the foregoing account. She also gave me, I doubt not, a true, though to be sure, a very brief and imperfect history of her captivity, which I here insert for your perusal. It may perhaps afford you some amusement, and can do no harm ; if after it has undergone your critical inspection, you should not think it (or an abbreviation of it) worthy to be preserved among the records you are about to publish.

‘The Indians (she says) having plundered and put fire to the Fort, we marched as near as I could judge, a mile and a half into the woods, where we encamped that night. When the morning came,

and we had advanced as much farther, six Indians were sent back to the place of our late abode, who collected a little more plunder, and destroyed some other effects that had been left behind ; but they did not return until the day was so far spent, that it was judged best to continue where we were, through the night. Early the next morning we set off for Canada, and continued our march eight days successively, until we had reached the place where the Indians had left their canoes, about fifteen miles from Crown Point. This was a long and tedious march ; but the captives, by divine assistance, were enabled to endure it with less trouble and difficulty, than they had reason to expect. From such savage masters, in such indigent circumstances, we could not rationally hope for kinder treatment than we received. Some of us, it is true, had a harder lot than others ; and, among the children, I thought my son Squire had the hardest of any. He was then only four years old, and when we stopped to rest our weary limbs, and he sat down on his master's pack, the savage monster would often knock him off ; and sometimes too, with the handle of his hatchet. Several ugly marks, indented in his head by the cruel Indians, at that tender age, are still plainly to be seen.

At length we arrived at Crown Point, and took up our quarters there, for the space of near a week. In the mean time some of the Indians went to Montreal, and took several of the weary captives along with them, with a view of selling them to the French. They did not succeed, however, in finding a market for any of them. They gave my youngest daughter, Submit Phipps, to the Governor, de Vaudreuil, had a drunken frolick, and returned again to Crown Point, with the rest of their prisoners. From hence we set off for St. John's, in four

or five canoes, just as night was coming on, and were soon surrounded with darkness. A heavy storm hung over us. The sound of the rolling thunder was very terrible upon the waters, which at every flash of expansive lightning, seemed to be all in a blaze. Yet to this we were indebted for all the light we enjoyed. No object could we discern any longer than the flashes lasted. In this posture we sailed in our open tottering canoes, almost the whole of that dreary night. The morning indeed had not yet begun to dawn, when we all went ashore; and having collected a heap of sand and gravel for a pillow, I laid myself down, with my tender infant by my side, not knowing where any of my other children were, or what a miserable condition they might be in. The next day, however, under the wing of that ever present and all-powerful Providence, which had preserved us thro' the darkness, and imminent dangers of the preceding night, we all arrived in safety at St. Johns.

Our next movement was to St. Francois, the metropolis, if I may so call it, to which the Indians, who led us captive, belonged. Soon after our arrival at their wretched capital, a council, consisting of the chief Sachem, and some principal warriors of the St. Francois tribe, was convened; and after the ceremonies usual on such occasions, were over, I was conducted and delivered to an old squaw, whom the Indians told me, I must call my mother. My infant still continuing to be the property of its original Indian owners, I was nevertheless permitted to keep it with me a while longer, for the sake of saving them the trouble of looking after it, and of maintaining it with my milk. When the weather began to grow cold, shuddering at the prospect of approaching winter, I acquainted my new mother that I did not think it would be possible for me to

endure it, if I must spend it with her, and fare as the Indians did. Listening to my repeated and earnest solicitations, that I might be disposed of among some of the French inhabitants of Canada, she, at length, set off with me and my infant, attended by some male Indians, upon a journey to Montreal, in hopes of finding a market for me there.

But the attempt proved unsuccessful, and the journey tedious indeed. Our provisions were so scanty as well as insipid and unfavoury, the weather was so cold, and the travelling so very bad, that it often seemed as if I must have perished on the way. The lips of my poor child were sometimes so benumbed that when I put it to my breast, it could not, till it grew warm, imbibe the nourishment requisite for its support. While we were at Montreal, we went into the house of a certain French gentleman, whose lady, being sent for, and coming into the room where I was, to examine me, seeing I had an infant, exclaimed suddenly in this manner, ‘Damn it, I will not buy a woman that has a child to look after.’ There was a swill-pail standing near me, in which I observed some crusts and crumbs of bread swimming on the surface of the greasy liquor it contained : Sorely pinched with hunger, I skimmed them off with my hands and eat them ; and this was all the refreshment which the house afforded me. Some where in the course of this visit to Montreal, my Indian mother was so unfortunate as to catch the small pox, of which distemper she died, soon after our return, which was by water, to St. Francois.

And now came on the season when the Indians begun to prepare for a winter’s hunt. I was ordered to return my poor child to those of them, who still claimed it as their property. This was a severe trial. The babe clung to my bosom with all

its might ; but I was obliged to pluck it thence, and deliver it, shrieking and screaming, enough to penetrate a heart of stone, into the hands of those unfeeling wretches whose tender mercies may be termed cruel. It was soon carried off by a hunting party of those Indians, to a place called Messiskow, at the lower end of Lake Champlain, whither, in about a month after, it was my fortune to follow them. I had preserved my milk, in hopes of seeing my beloved child again. And here I found it, it is true, but in a condition that afforded me no great satisfaction ; it being greatly emaciated, and almost starved. I took it in my arms, put its face to mine, and it instantly bit me with such violence, that it seemed as if I must have parted with a piece of my cheek. I was permitted to lodge with it that, and the two following nights ; but every morning that intervened, the Indians, I suppose on purpose to torment me, sent me away to another wigwam, which stood at a little distance, though not so far from the one in which my distressed infant was confined, but that I could plainly hear its incessant cries, and heart rending lamentations. In this deplorable condition I was obliged to take my leave of it, on the morning of the third day after my arrival at the place. We moved down the Lake several miles the same day ; and the night following was remarkable on account of the *great earthquake** which terribly shook that howling wilderness. Among the islands hereabouts we spent the winter season, often shifting our quarters, and roving about from one place to another ; our family consisting of three persons only, besides myself, viz. my late mother's daughter, whom therefore I called my sister, her fianhop, and a pappoose. They once left me alone two dismal nights ; and when they returned to me again,

* Nov. 18, 1755.

perceiving them smile at each other, I asked what is the matter ? They replied, that two of my children were no more : One of which, they said, died a natural death, and the other was knocked on the head. I did not utter many words, but my heart was sorely pained within me, and my mind exceedingly troubled with strange and awful ideas. I often imagined, for instance, that I plainly saw the naked carcases of my deceased children hanging upon the limbs of the trees, as the Indians are wont to hang the raw hides of those beasts which they take in hunting. It was not long, however, before it was so ordered by kind Providence, that I should be relieved in a good measure from those horrid imaginations ; for as I was walking one day upon the ice, observing a smoke at some distance upon the land, it must proceed, thought I, from the fire of some Indian hut, and who knows but some one of my poor children may be there. My curiosity, thus excited, led me to the place, and there I found my son Caleb, a little boy between two and three years old, whom I had lately buried, in sentiment at least ; or rather imagined to have been deprived of life, and perhaps also denied a decent grave. I found him likewise in tolerable health and circumstances, under the protection of a fond Indian mother ; and moreover had the happiness of lodging with him in my arms one joyful night. Again we shifted our quarters, and when we had travelled eight or ten miles upon the snow and ice, came to a place where the Indians manufactured sugar which they extracted from the maple trees. Here an Indian came to visit us, whom I knew, and could speak English. He asked me why I did not go to see my son Squire. I replied that I had lately been informed that he was dead. He assured me that he was yet alive, and but two or three miles off, on the opposite side of the

Lake. At my request he gave me the best directions he could to the place of his abode. I resolved to embrace the first opportunity that offered of endeavoring to search it out. While I was busy in contemplating this affair, the Indians obtained a little bread, of which they gave me a small share. I did not taste a morsel of it myself, but saved it all for my poor child, if I should be so lucky as to find him. At length, having obtained of my keepers leave to be absent for one day, I set off early in the morning, and steering, as well as I could, according to the directions which the friendly Indian had given me, I quickly found the place, which he had so accurately marked out. I beheld, as I drew nigh, my little son without the camp ; but he looked, thought I, like a starved and mangy puppy, that had been wallowing in the ashes. I took him in my arms, and he spoke to me these words, in the Indian tongue : ‘Mother are you come ?’ I took him into the wigwam with me, and observing a number of Indian children in it, I distributed all the bread which I had reserved for my own child, among them all, otherwise I should have given great offence. My little boy appeared to be very fond of his new mother, kept as near me as possible while I staid, and when I told him I must go, he fell as though he had been knocked down with a club. But having recommended him to the care of Him that made him, when the day was far spent, and the time would permit me to stay no longer, I departed, you may well suppose, with a heavy load at my heart. The tidings I had received of the death of my youngest child had, a little before, been confirmed to me beyond a doubt, but I could not mourn so heartily for the deceased as for the living child.

When the winter broke up, we removed to St. John’s ; and, through the ensuing summer our prin-

cipal residence was at no great distance from the fort at that place. In the mean time, however, my sister's husband having been out with a scouting party to some of the English settlements, had a drunken frolic at the fort, when he returned. His wife, who never got drunk, but had often experienced the ill effects of her husband's intemperance, fearing what the consequence might prove, if he should come home in a morose and turbulent humour, to avoid his insolence, proposed that we should both retire, and keep out of the reach of it, until the storm abated. We absconded accordingly, but so it happened, that I returned, and ventured into his presence, before his wife had presumed to come nigh him. I found him in his wigwam, and in a surly mood; and not being able to revenge upon his wife, because she was not at home, he laid hold of me, and hurried me to the fort; and for a trifling consideration, sold me to a French gentleman, whose name was Saccapee. 'Tis an ill wind certainly that blows no body any good. I had been with the Indians a year lacking fourteen days; and, if not for my sister, yet for me, 'twas a lucky circumstance indeed, which thus at last, in an unexpected moment, snatched me out of their cruel hands, and placed me beyond the reach of their insolent power.

After my Indian master had disposed of me in the manner related above, and the moment of sober reflection had arrived, perceiving that the man who bought me had taken the advantage of him in an unguarded hour, his resentments begun to kindle, and his indignation rose so high, that he threatened to kill me if he should meet me alone, or if he could not revenge himself thus, that he would set fire to the fort. I was therefore secreted in an upper chamber, and the fort carefully guarded, until his wrath had time to cool. My service in the

family to which I was now advanced, was perfect freedom, in comparison of what it had been among the barbarous Indians. My new master and mistress were both as kind and generous towards me as I could any ways expect. I seldom asked a favor of either of them, but it was readily granted : In consequence of which I had it in my power, in many instances, to administer aid and refreshment to the poor prisoners of my own nation, who were brought into St. John's during my abode in the family of the above-mentioned benevolent and hospitable Saccabee. Yet even in this family such trials awaited me as I had little reason to expect, but stood in need of a large stock of prudence, to enable me to encounter them. Must I tell you then, that even the good old man himself, who considered me as his property, and likewise a warm and resolute son of his, at that same time, and under the same roof, became both excessively fond of my company ; so that between these two rivals, the father and the son, I found myself in a very critical situation indeed, and was greatly embarrassed and perplexed, hardly knowing many times, how to behave in such a manner as at once to secure my own virtue, and the good esteem of the family in which I resided, and upon which I was wholly dependent for my daily support. At length, however, through the tender compassion of a certain English gentleman,* the Governor de Vaudreuil being made acquainted with the condition I had fallen into, immediately ordered the young and amorous Saccabee, then an officer in the French army, from the field of Venus to the field of Mars, and at the same time also wrote a letter to his father, enjoining it upon him, by no means to suffer me to be abused, but to make my situation and service in his fam-

* Col. Peter Schuyler, then a prisoner.

ily as easy and delightful as possible. I was moreover under unspeakable obligations to the Governor upon another account. I had received intelligence from my daughter Mary, the purport of which was, that there was a prospect of her being shortly married to a young Indian of the tribe of Saint Francois, with which tribe she had continued from the beginning of her captivity. These were heavy tidings, and added greatly to the poignancy of my other afflictions. However, not long after I had heard this melancholy news, an opportunity presented, of acquainting that humane and generous gentleman, the commander in chief, and my illustrious benefactor, with this affair also, who in compassion for my sufferings, and to mitigate my sorrows, issued his orders in good time, and had my daughter taken away from the Indians, and conveyed to the same nunnery where her sister was then lodged, with his express injunction, that they should both of them together, be well looked after, and carefully educated, as his adopted children. In this school of superstition and bigotry, they continued while the war in those days between France and Great-Britain lasted. At the conclusion of which war, the Governor went home to France, took my oldest daughter along with him, and married her then to a French gentleman, whose name is Cron Lewis. He was at Boston with the fleet under Count de Estaing, [1778] and one of his Clerks. My other daughter still continuing in the nunnery, a considerable time had elapsed after my return from captivity, when I made a journey to Canada, resolving to use my best endeavors not to return without her. I arrived just in time to prevent her being sent to France. She was to have gone in the next vessel that sailed for that place. And I found it extremely difficult to prevail with her to quit the

nunnery and go home with me. Yea, she absolutely refused, and all the persuasions and arguments I could use with her, were to no effect, until after I had been to the Governor and obtained a letter from him to the superintendant of the nuns, in which he threatened, if my daughter should not be immediately delivered into my hands, or could not be prevailed with to submit to my parental authority, that he would send a band of soldiers to assist me in bringing her away. Upon hearing this she made no farther resistance. But so extremely bigoted was she to the customs and religion of the place, that after all, she left it with the greatest reluctance, and the most bitter lamentations, which she continued as we passed the streets, and wholly refused to be comforted. My good friend, Major Small, whom we met with on the way, tried all he could to console her; and was so very kind and obliging as to bear us company, and carry my daughter behind him on horseback.

But I have run on a little before my story, for I have not yet informed you of the means and manner of my own redemption, to the accomplishing of which; the recovery of my daughter just mentioned, and the ransoming of some of my other children, several gentlemen of note, contributed not a little; to whose goodness, therefore, I am greatly indebted, and sincerely hope I shall never be so ungrateful as to forget. Col. Schuyler in particular was so very kind and generous as to advance 2700 livres to procure a ransom for myself and three of my children. He accompanied and conducted us from Montreal to Albany, and entertained us in the most friendly and hospitable manner a considerable time, at his own house, and I believe entirely at his own expense.

I have spun out the above narrative to a much greater length than I at first intended, and shall conclude it with referring you, for a more ample and *brilliant* account of the captive heroine, who is the subject of it, to Col. Humphrey's history of the life of Gen. Israel Putnum, together with some remarks upon a few clauses in it. I never indeed had the pleasure of perusing the whole of said history, but remember to have seen, some time ago, an extract from it in one of the Boston newspapers, in which the Colonel has extolled the beauty and good sense, and rare accomplishments of Mrs. Howe, the person whom he endeavors to paint in the most lively and engaging colours, perhaps a little too highly, and in a style, that may appear to those who are acquainted with her at this day, romantick and extravagant. And the Colonel must needs have been misinformed with respect to some particulars that he has mentioned in her story. Indeed, when I read the extract from his history to Mrs. Tute, (which name she has derived from a third husband, whose widow she now remains) she seemed to be well pleased, and said, at first, it was all true, but soon after contradicted the circumstance of her lover's being so bereft of his senses when he saw her moving off in a boat at some distance from the shore, as to plunge into the water after her, in consequence of which he was seen no more. It is true, she said, that as she was returning from Montreal to Albany, she met with young Saccabee on the way. That she was in a boat with Col. Schuyler, that the French officer came on board the boat, made her some handsome presents, took his final leave of her, and departed, to outward appearance, in tolerable good humour.

She moreover says, that when she went to Canada for her daughter, she met with him again, that he show-

ed her a lock of her hair, and her name likewise, printed with vermilion on his arm. As to her being chosen agent to go to Europe, in behalf of the people of Hinsdale, when Col. Howard obtained from the government of New-York a patent of their lands on the west-side of Connecticut river, it was never once thought of by Hinsdale people until the above-mentioned extract arrived among them, in which the author has inserted it as a matter of undoubted fact.

No. XI.

AT THE COURT AT ST. JAMES'S,

The 20th Day of July, 1764,

PRESENT

THE KING'S MOST EXCELLENT MAJESTY,

<i>Lord Howard,</i>	<i>Earl of Hillsborough,</i>
<i>Earl of Sandwich,</i>	<i>Mr. Vice-Chamberlain,</i>
<i>Earl of Halifax,</i>	<i>Gilbert Elliot, Esq.</i>
<i>Earl of Powis,</i>	<i>James Oswald, Esq.</i>
<i>Earl of Harcourt,</i>	

WHEREAS there was this day read at the Board a report made by the Right Honourable the Lords of the Committee of Council for Plantation Affairs, dated the 17th of this instant, upon considering a Representation from the Lords Commissioners for Trade and Plantations, relative to the disputes that have for several years subsisted between the Provinces of New-Hampshire and New-York, concerning the Boundary Line between those Provinces. His Majesty taking the same into consideration, was pleased, with the advice of his Privy Council, to approve of what is therein proposed, and

doth accordingly hereby Order and Declare, the western banks of the river Connecticut, from where it enters the Province of the Massachusetts Bay, as far North as the forty-fifth degree of Northern Latitude, *to be* the Boundary Line between the said two Provinces of New-Hampshire and New-York. Whereof the respective Governors and Commanders in Chief of his Majesty's said Provinces of New-Hampshire and New-York, for the time being, and all others whom it may concern, are to take notice of his Majesty's pleasure hereby signified, and govern themselves accordingly.

W. BLAIR.

No. XII.

Copy of a Report of a Committee of both Houses of the Massachusetts Assembly, respecting the New-Hampshire Line, December 1766.

THE committee to whom was referred the affair of the line between the province of Maine, now a part of the Massachusetts Bay, and that of New-Hampshire, beg leave to represent the facts as they appeared to them.

The commissioners appointed by his late Majesty, King George the second, to settle the line between the two governments aforesaid, A. D. 1737, reported the same to begin in the middle of the mouth of Pascataqua harbor, and up the river Newichawanoock, a part of which is called Salmon fall, and through the middle of the same to the farthest head thereof; and from thence north two degrees west, until one hundred and twenty miles be finished, from the mouth of Pascataqua harbour aforesaid, or until it meets with his Majesty's other governments. Governor Belcher, who was then at the head of

both provinces, in the winter of the year 1740-1, moved to the Assembly of the Massachusetts to appoint a committee to join with those of New-Hampshire, in order to run out and mark the aforesaid line, agreeable to the determination of the commissioners aforesaid. But the Assembly, after several motions made to them, referred the consideration of this affair to the then next May session. Governor Belcher soon after met the Assembly of New-Hampshire, who, upon a motion made to them of running the line aforesaid, complied, and in the month of March 1741, proceeded on the affair *ex parte*, beginning at the head of the easternmost and smallest branch of the aforesaid river, and run twenty-five or thirty miles into the country ; this was performed by Walter Bryant, by order from Governor Belcher ; and however imperfect this survey was, that government have returned it, together with a plan thereof ; but the royal approbation in Council is had in the words of the commissioners' report, abovementioned, without having any regard to the survey aforesaid, and it has been found, by the most careful examination, that the river is much larger than the branch from whence the said Bryant then took his departure ; and this appears by his own evidence, together with Capt. Gowing's and Warren's. And your committee beg leave further to observe, that, by the plan taken by Bryant, and by the government of New-Hampshire lodged with the board of trade, a copy of which we have received from that Province, it appears that the easternmost branch of the River aforesaid, which the surveyor then took, runs about north and by east ; and by the plan sent home by the commissioners, taken by Mr. Jeffrey, and which accompanied their report of the settlement of the line, in 1737, it appears that the river, there laid down, runs north northwest, (a

copy of which is here authenticated) which exactly agrees with the middle or main branch, and is what this Province claims to; so that by comparing the two plans, it appears Mr. Bryant was mistaken in taking a pond at the head of the east branch, which he called Lovell's pond, when he should, agreeable to the commissioners' report, have taken the middle or main branch of the river, where was a pond then called, and many years before and since, known by the name of Lovell's pond, and to this pond Mr. Bryant himself carried our committee, in 1766, and declared that was always called Lovell's pond; which lies at the head of the river, and as those two branches are at six or seven miles distance, at right angles at the head, a large tract of land near six miles wide, and sixty or seventy miles in length, was taken into New-Hampshire government, that ought to have remained to the Massachusetts. Upon the whole it evidently appears to your committee that there was a mistake made in the commencement of the line, in part pretended to be run by Mr. Bryant in the year 1740-1, and that the same was not then run out is as evident. And from the year 1763, all possible care has, by this government, been taken to rectify this mistake. Committees have once and again been appointed by this Court to join with New-Hampshire in order thereto, but without success. However, as to the propriety of this Court's pursuing the controversy under its present circumstances, your committee having reported the facts, submit to your honors consideration.

BENJA. LINCOLN, per order.

No. XIII.

A Letter from WALTER BRYENT Esq. to the Author, on the same subject.

New-Market, Oct. 9, 1790.

REV. SIR,

YOURS of the 27th ult. received, and in answer to your request, I can inform you, that about 1766, the Massachusetts General Court appointed a committee (Col. Lincoln, Col. Bagley, and Esq. Livermore) to inquire and examine into a mistake, which some in that government supposed I had made, in running the Province Line from the head of Salmon-falls river, which committee applied to the then Governor, Benning Wentworth, of New-Hampshire, to join in such examination, who accordingly requested me to attend the committee, and also appointed Col. John Wentworth of Somersworth, a justice of quorum, to take my deposition on the spot, if necessary, to give the committee full satisfaction. Accordingly the said committee, with Col. Wentworth, myself, and about five or six assistants, went up Salmon Falls river to where the branches met, and viewed it well, and from thence we went up the westerly branch to the head thereof; and from thence crossed over to the head of the eastermost branch, and found to the committee's satisfaction, that the easterly branch was much the largest of the two; vented much more water, and proceeded from a larger pond than the westerly branch. At the pond at the head of the easterly branch, called in the commissioners' plan, Lovewell's pond, I shewed them the tree from which I formerly run the Province line, well spotted, with the letters on it, according to my return of the Province line, and the line well spotted from it. Some of

the committee thereupon suggested, that possibly that might be the line I run some years afterwards, in laying out the patent for the Masonian proprietors.

I replied I was ready to make oath that that was the identical line I run for the province line, and of the certainty of which they might then easily be convinced by examining the spots ; for it having then been twenty-six years since I run the Province line, and but seven years since I had run the Masonian patent, if they would cut into a spot on a growing tree, they might then examine whether there was seven years growth, or twenty-six years growth over the spot. Accordingly we marched on the line till we found a large bass tree spotted, and one of the company cut square into the tree against the spot to the dead wood, and Col. Bagley began at the last years growth, and counted aloud twenty-four years growth in the grain of the wood above or outside the dead wood of the spot. Col. Bagley then turning to me said, 'Bryent, I'll swear for you, that this tree was spotted more than twenty years ago ;' Col. Wentworth then asked the committee if they desired my deposition to be taken, they answered 'No, we are all well satisfied without it'—and therefore we returned. I can add no more respecting that line, only, being once at York, during the sitting of the Superior Court, some of the Judges being informed that I was the Surveyor that run the Province line, sent for me to come to their lodgings. I attended, and after some conversation Mr. Trowbridge, then Attorney-General, being present, asked me what variation was allowed in running that line ; I told him ten degrees ; he replied, you allowed too much ; and observed to Governor Hutchinson, then Chief-Justice, that the line ought to be run anew ; Governor Hutchinson

replied, that it would be attended with cost, and that it was not likely New-Hampshire would consent and join. I told them New-Hampshire would readily enough join to run anew with less variation, if requested. They all seemed surprised, and desired to know what reason I had to think New-Hampshire would consent, inasmuch as it would take off a large tract of Pigwacket Intervales. I told them New-Hampshire would gain much more, at Dunstable and the other towns on the west line, for the same variation was allowed on both lines. On which there was a great laugh in the company, and nothing further said about the matter.

I am, Sir, with due respect,

Your most humble servant,

WALTER BRYENT.

Rev. Mr. Belknap.

No. XIV.

Mr. SPROULE's account of an examination of the south boundary of New-Hampshire.

THE point at Hinsdale, where the southerly line of the Province of New-Hampshire strikes Connecticut river, lies in $42^{\circ} 43' 59''$ north latitude, and the pine tree from whence this line begins, lies in $42^{\circ} 41' 2''$; (both latitudes are deduced from accurate astronomical observations taken by Mr. Wright) but had this line been run on a due west course, deducting the variation of the needle, the point where it meets Connecticut river, should lie in the same parallel of latitude with the pine tree; now it appears the difference of latitude is 2 miles and 53 seconds of the equator, and the extent of the line from the pine tree to Connecticut river, is found to be 55 statute miles, from an actu-

al survey: these lines from the base and perpendicular of a triangle, containing 59,872 acres, which quantity of land the Province of New-Hampshire would have gained, had the line been run on a due west course from the pine tree, exclusive of variation.

GEORGE SPROULE.

Portsmouth, April 3th, 1774.

No. XV.

*Copy of the return of a survey of the northern part of New-Hampshire,
1789.*

WE, the subscribers, a committee for ascertaining the waste lands in the State of New-Hampshire, have proceeded to run the line on the easterly side of said State, *the same *course that the line was formerly run* and spotted between this State and the Massachusetts. We begun to measure and spot at the northeast corner of Shelburne in this State, and measured on to the waters of Umbagog lake, which is 16 miles and 240 rods, then across a branch of said lake 54 rods, then 14 rods on the land to a river that is 6 rods wide, and runs westerly into said lake, then measured on the land 1 mile and 226 rods to said lake, then across the water 40 rods, then over a neck of land 16 rods to an arm of said lake, then across the water 235 rods, then we continued on our course 195 rods to said lake, then across said lake about $3\frac{1}{2}$ miles, then we measured and spotted 2 miles and 226 rods to Margalloway river, that runs about south-west, and is about 10 rods wide, and empties into Amoriscoggin river, a little below said lake; then we measured on our course 1 mile and 70 rods, and crossed said Margalloway river again, which will more fully ap-

* In the orders given to WALTER BRYANT by Governor BELCHER, 1741, it is said, 'The true north 2 degrees west, is by needle N. 8° E.'

pear by the plan herewith exhibited ; we continued on our line, measured and spotted to the high lands that divide the waters that fall into the river St. Lawrence and the Atlantic Ocean. From the north-east corner of Shelburne to said high lands is 54 miles, and we marked a tree at the end of every mile, except where miles ended on water, from one to 54 miles inclusive, where we marked a large *birch* tree that stands on said high lands, thus N. E. 54 M. NEW-HAMPSHIRE, 1789, for the north-east corner of New-Hampshire, and piled stones round said tree ; then from said north-east corner, where we marked the *birch*, we measured and spotted south-westerly and westerly on said highlands about 6 miles, then we run about west, measured and marked a tree at the end of every mile from said *birch*, marked 54 miles, at the north-east corner of said State from 1 to 17 miles and 200 rods to the head of the northwest of Connecticut river, and marked a *fir* tree N. H. N. W. 1789, for the north-west branch corner of New-Hampshire, then down said river or north-west branch to the main river about half a mile below latitude 45° north, which will more fully appear by the plan. The mountains, streams and waters are laid down on the plan very accurate where the line we run crossed them, but where they were at some distance from our line we laid them down by conjecture.

JOSEPH CRAMM,	}	Surveyors.
JEREMIAH EAMES.		

JOHN SULLIVAN,	}	Committee.
EBENEZER SMITH,		
NATHAN HOIT,		
JEREMIAH EAMES.		

A true copy.—Attest

JOSEPH PEARSON, *Secretary.*

Portsmouth, January 6, 1790.

No. XVI.

Description of a survey made by JAMES GRANT, one of Capt. HOLLAND's party, in 1773, or 1774, to explore the country, for a road, between the upper part of Connecticut river, and the river of St. Francis.

FROM the mouth of Leach's river which falls into Connecticut river on the west side, near the 45th degree of latitude, up to the eastern side of Leach's river - - -	course.	dist.
	N	M. $1\frac{1}{2}$
Thence to cross said river among the mountains - - -	N 30 W	$3\frac{3}{4}$
Thence to the height of Land -	N 30 W.	3
Thence to a pond under the eastern side of a mountain - -	N 30 W	3
Thence to another pond - -	N 10 W	$5\frac{1}{4}$
Thence on the same course -	N 10 W	$4\frac{1}{2}$
Thence to a small river which falls into Memphrimagog river - -	N 21 W	16
Thence across said little river to the lower crotch of Memphrimagog river - - -	N 21 W	$5\frac{1}{2}$
Thence crossing Memphrimagog river, a strait line on the N W side, to its junction with the river of St. Francis - - -	N 30 E	$1\frac{1}{2}$
		<hr/> 44 <hr/>

The country from Connecticut river to the Height of Land is very hilly, with high mountains on the east and west of the line run, in the direction of which a road may be conveniently made.

From the Height of Land to St. Francis river there is a gradual descent through a plain country ;

the soil in general of a good quality, and in some parts extraordinary fine; particularly for about four miles beyond the Height of Land, and for twenty miles on this side of St. Francis river; which river, with its branches, are bordered with fine intervals.

The principal growth between the Height of Land and St. Francis River, is beech, maple, birch, hemlock and fir; very few white pines, and no oak of any sort; many cedar, spruce and hemlock swamps intervene; but none so morassy as to impede a road, for which this extent of country in the direction above described, is in general as well adapted as possible.

No. XVII.

A REPORT from the LORD'S COMMISSIONERS for TRADE and PLANTATIONS on a complaint made by PETER LIVIUS, Esquire, against JOHN WENTWORTH, Esquire, Governor of the Province of NEW-HAMPSHIRE.

TO THE KING'S MOST EXCELLENT MAJESTY.

May it please your Majesty,

PETER LIVIUS, Esquire, one of your Majesty's Council for the Province of New-Hampshire, in North America, having, on the ninth of July, presented a memorial unto us, complaining of the conduct of John Wentworth, Esquire, Your Majesty's Governor of that Province, and charging him with Oppression and Mal-administration in the government thereof: And it appearing, upon reference to the papers and records in our office, that the journals of the Council of said Province, as a Council of State, and to which the complainant referred

for proof of most of the facts stated in his memorial, had not been transmitted since the commencement of Mr. Wentworth's administration : We thought it our duty immediately to send to the said Governor, a copy of the memorial of complaint ; and to require him, to lose no time in transmitting to us a full and explicit answer to the several charges alledged against him, accompanied with such depositions and proofs in his own behalf as he should think proper ; giving, at the same time, full liberty to Mr. Livius, or any other person concerned, to make affidavit, before any judge or other Magistrate, of what they knew concerning the subject matter of the said complaint ; and that such Judge or other Magistrate should be likewise enjoined, to summon such persons as the complainant, or any other in his behalf, should name.

That the Secretary should be likewise enjoined to give attested copies (from the records) of the minutes of the Council, and of any other concerned. And if it should appear as alledged by Mr. Livius, that the said minutes or other records were defective, in any matter required by him or them ; or that those transactions which were alledged to have passed at any meetings of the Council, had been omitted to be entered on the journal ; then that the Secretary should, in such cases, be further enjoined to give evidence, upon oath, touching such defect or omission.

That the said Governor and the complainant, or other person or persons, should interchange the said proofs and depositions as soon as the same should have been made ; and that twenty days should be allowed, as well for himself, as the complainant, or other person concerned, to make his or their reply by affidavit or otherwise, to be in like manner interchanged, and afterwards certified and transmitted

to us, under the seal of the Province ; that we might be enabled to represent to your Majesty, on the true state of this affair, pursuant to the powers and directions contained in our commission under the great seal.

In consequence of the foregoing directions, your Majesty's Governor has transmitted to us his answer to each article of complaint contained in Mr. Livius's memorial, accompanied with attested copies of the Journals of the Council, as a Council of State, from the commencement of his administration, and of such depositions as have been taken to support the facts alledged by the Governor in defence of his conduct. And we have taken the said complaint and answer into our consideration, together with Mr. Livius's reply to the said answer, copies of all which are hereunto annexed ; and having heard counsel learned in the law, as well in support of the complaint, as of the Governor's defence ; we humbly beg leave to represent to your Majesty thereupon :

That it does appear, upon full examination and clear evidence ;

First, That your Majesty's Governor of New-Hampshire has, in concurrence with the Council for the said Province, composed almost altogether of his own kindred or relations by blood or marriage, taken upon him to resume and re-grant many large tracts within the said Province, the property of your Majesty's subjects by virtue of several former grants ; upon bare suggestion only, that the conditions of such former grants had not been complied with, and without the intervention of a Jury, or any proof or evidence whatever, to establish the fact of such default.

Secondly, That these resumptions have been made without any notice (except in one or two ca-

ses) to the proprietors of such tracts, so resumed ; and that, in some instances, in which the Governor and Council did think fit to allow time to the proprietors of certain tracts to make good the conditions of their grants, such grants were nevertheless resumed, and the lands re-granted, long before the expiration of the time allowed, and without any notice given to the parties.

Thirdly, That the said Governor did, without any legal process whatever, resume and regrant several tracts of land reserved to the said late Governor within each of the townships, granted by him, and which reservations he had, by his will, devised to his widow ; and that such resumption was made in consequence of a resolution of the Council, ‘ That the said reservations did not convey the premises, they being granted by the Governor to himself.’

Fourthly, That, pending an action brought in the Inferior Court of Common Pleas, in which your Majesty’s Governor was interested, and which he admits was brought for his benefit, the Judges were, in three successive terms, changed, and especial Judges appointed : That, in the standing Court of Common Pleas which first sat in judgment upon the action brought by the Governor, a question arising out of the action was decided against the Governor’s interest : That in the second term, two Judges were appointed, which together with one of the Judges of the standing Court abovementioned, adopted the decision of the former court : That, in the third term, two of the Judges were again changed, when the same question was again brought forward, and decided in the same manner as above : That, in the fourth term, two of the Judges who sat in the former court were removed, and a new bench appointed, consisting of Jacob Sheaffe and John Philips, Esquires, who had not acted in that

capacity in any of the preceding Terms, and of Nathaniel Folsom, who had served in the terms, and who is stated to have been uniformly of opinion for the Governor in the question that had been agitated upon the action in which the said Governor was interested ; and that, in the last mentioned court, the said question was a fourth time brought on to trial, and a judgment obtained in favor of the Governor, though afterwards reversed in the Superior Court in consequence of a Writ of Error.

These, may it please your Majesty, are the material parts of the charge exhibited against Mr. Wentworth ; nor is there any other part of the complaint exhibited by Mr. Livius, upon which any evidence has been produced to us, that does, in our humble opinion, lay the foundation for censure upon the Governor's conduct. What we have stated, with respect to the resumption and re-granting of lands, is not, we think, to be justified, either by the plea of usage or expediency, or by the opinion of the Attorney and Solicitor General in one thousand seven hundred and fifty-two, upon which the Governor lays so great stress ; which opinion appears to us, upon full examination of it, to be confined to a particular case stated to them, not corresponding with the cases in which the conduct of Mr. Wentworth is complained of ; and that, if it was applicable to such cases, yet it does not, in our humble opinion, warrant any resumption of lands, claimed as private property under grants from the crown, upon bare suggestion only, that the conditions have not been complied with ; but on the contrary does, we humbly conceive, imply, that the fact of the default should be first found in a regular course of law. We further crave leave humbly to represent, that, admitting the said opinion did warrant such a proceeding, in respect to grants, the conditions of

which had not been complied with, which we conceive it does not ; yet it is certainly not applicable either to the case of lands resumed and re-granted before the term allowed for fulfilling the conditions of settlement were expired ; or to the case of the reservations to the late Governor, devised by him to his widow, the resumption and re-granting of which, in manner above stated, upon an extrajudicial opinion of the Council, was, in our judgment, unwarrantable and unjust. And we submit, whether the misconduct of your Majesty's Governor, under these heads of complaint, is not greatly aggravated by his having omitted, from the commencement of his administration, to transmit the journals of the Council, as a Council of State ; a neglect for which he is certainly responsible, and by which transactions of the greatest importance to your Majesty's interest and the right of your Majesty's subjects have been concealed from your Majesty's knowledge ; and the Governor and his Council have gone on, for a series of years, in a course of very irregular proceedings, without controul.

With regard to what has been proved respecting the change of the Judges, though asserted, in a great number of depositions transmitted by the Governor, to have been consonant to the usage and practice in the Colony ; it is yet, in our humble opinion, a proceeding that, under all the circumstances attending it, is of a very extraordinary nature, and does lead to the suspicion and presumption of very unworthy conduct on the part of your Majesty's Governor. And, upon the whole, we humbly submit, ' That the complaint against Mr. Wentworth, so far ' as it regards the facts above stated, has been fully ' verified.' At the same time it is our duty to represent, that the reports which we have received, through different channels, of the situation of affairs within

your Majesty's government of New-Hampshire, do all concur in representing 'the Colony to have been, 'ever since Mr. Wentworth's appointment; in a 'state of peace and prosperity; that its commerce 'has been enlarged and extended, the number of its 'inhabitants increased; and every attempt made to 'excite the people to disorder and disobedience has 'been, by the firm and temperate conduct of Mr. 'Wentworth, suppressed and restrained.' But upon the whole; we humbly submit, whether Mr. Wentworth's conduct, in the instances of the mal-administration with which he has been charged, has been such as renders him a fit person to be entrusted with your Majesty's interests in the important station he now holds.

All which is humbly submitted.

Signed,

W. JOLIFFE.

SOAME JENYNS.

BAMBER GASCOYNE.

GREVILLE.

GARLIES.

White-Hall,
May the 10th, 1773.

No. XVIII.

Report of the Committee of the Privy Council, and its acceptance by the King.

(COPY.)

At the Court at St. James's the 8th Day of October, 1773.

(L. S.)

PRESENT

THE KING's MOST EXCELLENT MAJESTY.

EARL OF SUFFOLK,	LORD NORTH,
EARL OF SANDWICH,	RICHARD RIGBY,
VIS. BARRINGTON,	GEORGE ONSLOW.

WHEREAS there was this day read at the board, a report from the Right Honorable the Lords of the Committee of council for plantation

affairs,* dated the 26th of August last, in the words following ; viz.

“ Your Majesty having been pleased, in consequence of a memorial presented to your Majesty from Sir Thomas Wentworth, Baronet, Paul Wentworth, Esquire, and Thomas Macdonagh, secretary to John Wentworth, Esquire, Governor of the Province of New-Hampshire, to refer unto this committee a representation from the Lords Commissioners for trade and plantations, dated the 10th of May last, upon a complaint exhibited to the said Lords Commissioners against the said Governor Wentworth, by Peter Livius, Esquire, one of your Majesty’s Council for the said Province, together with several other papers transmitted by the Earl of Dartmouth, one of your Majesty’s principal Secretaries of State, to the Lord President of the Council, relative to the said complaint : The Lords of the committee, in obedience to your Majesty’s said order of reference, have met several times, and taken the said matters into consideration, and have heard Counsel on both sides. And, having maturely weighed and considered the complaint against the said Governor, the answer of the said Governor, and the reply of the said Peter Livius, Esquire, together with the proofs on all sides, and the said representation of the Lords Commissioners for trade and plantations ; the Lords of the committee do humbly represent to your majesty,

“ That the first article of Charge, contained in the above mentioned representation of the Lords Commissioners for trade and plantations, sets forth, ‘ That your Majesty’s Governor of New-Hampshire has, in concurrence with the Council for the

* LORDS OF THE COMMITTEE.

Lord Suffolk President,
Arch Bishop of Canterbury,
Sir Fletcher Norton,

Sir Eardly Wilmot,
Sir Thomas Parker.

faid Province, compofed almost altogether of his own kindred, or relations by blood or marriage, taken upon him to refume and re-grant many large tracts of lands within the faid Province, the property of your Majesty's fubjects, in virtue of former grants, upon bare fuggeltion only, that the conditions of fuch former grants had not been complied with, and without the intervention of a jury, or any proof or evidence whatfoever, to eftablifh the fact of fuch default.

“ With refpect to which article, the Lords of the Committee do humbly report to your Majesty, That, by the law of England; when lands are granted to a man and his heirs, upon condition, the breach of the condition muft be found by a jury, under a commiffion, iffuing out of the Court of Chancery, before your Majesty can feize and re-grant the fame: But, in the Province of New-Hampshire, there is no Court of Chancery, or other court, empowered to iffue fuch a commiffion; and though the general rule is, that the law of England takes place in your Majesty's Colonies, yet it muft be always underftood to mean fuch part of the law as is fited and adapted to the ftate of the Colony, and to the frame and nature of the conftitution eftablifhed there; and though the Governor, in concurrence with the Council for the faid Province, hath refumed and re-granted many tracts of lands within the faid Province, which had been formerly granted to other perfons, yet no evidence hath been laid before the committee of any fuch refumptions and re-grants having been made, without proof or public notoriety that the conditions of fuch former grants had not been complied with; and no complaint hath been, or is now made by any perfon fupposed to be injured by fuch refumptions and re-grants.

“ The second article states, ‘ That these resumptions have been made without any Notice (except in one or two cases) to the proprietors of such tracts so resumed ; and that in some instances, in which the Governor and Council did think fit to allow time to the proprietors of certain tracts to make good the conditions of their grants, such grants were nevertheless resumed, and the lands re-granted, long before the expiration of the time allowed, and without any notice given to the parties.’

“ As to which article, the Lords of the Committee do humbly report to your Majesty, ‘ That it hath not been proved that any resumptions have been made, without notice to the proprietors of such tracts so resumed ; and it is no part of the original complaint made by Mr. Livius, that in any instance, in which the Governor and Council thought fit to allow time to the proprietors of lands to make good the conditions of their grants, such grants were resumed, and the lands re-granted, before the expiration of the time allowed ; and the Governor not having had an opportunity of answering that complaint, the Lords of the committee are humbly of opinion, no notice can be taken of it.

“ The third article represents, ‘ That the said Governor did, without any legal process whatsoever, resume and re-grant several tracts of land, reserved to the late Governor, within each of the townships granted by him, and which reservations he had by his will devised to his widow ; and that such resumption was made in consequence of a resolution of the Council, that the said reservations did not convey the premises, they being granted by the Governor himself.

“ With respect to this article, the Lords of the committee do humbly report, That the lands were granted, but not reserved to the late Governor and

his heirs in each of the townships granted by him ; but being granted by your Majesty, in your Majesty's name, and not in the Governor's name, the grants were sufficient to convey the lands so granted to him, and the Council was mistaken in thinking them insufficient ; and the Lords of the Committee find, that after such an opinion given by the Council, the Governor did, with their advice, resume and re-grant several tracts of lands, which had been granted by the late Governor within each of the townships, as aforesaid ; But it hath not been proved that the said lands were re-granted in trust for himself ; and in many instances it hath been proved, that such lands were re-granted to different inhabitants in the said Province, for their own use and benefit ; and the representatives of the late Governor's widow to whom he had devised the same, have not complained of any injury or oppression by such resumption and re-grants.

“And the fourth article alledges, ‘ That pending an action brought in the Inferior Court of Common Pleas, in which your Majesty's Governor was interested, and which he admits was brought for his benefit, the Judges were in three successive terms, changed, and special Judges appointed : That, in the standing Court of Common Pleas, which first sat in judgment upon the action brought by the Governor, a question arising out of the action, was decided against the Governor's interest : That, in the second term, two new judges were appointed, which, together with one of the Judges of the standing Court above mentioned, adopted the decision of the former Court : That, in the third term, two of the judges were again changed when the same question was again brought forward, and decided in the same manner as above ; that in the fourth term, two of the Judges, who sat in the for-

mer Court, were removed, and a new Bench appointed, consisting of Jacob Sheaffe and John Phillips, Esquires, who had not acted in that capacity in any of the preceding terms, and of Nathaniel Folsom, who had served in the two preceeding terms, and who is stated to have been uniformly of opinion for the Governor, in the question that had been agitated upon the action in which the said Governor was interested ; and that in the last mentioned Court, the said question was a fourth time brought on to trial, and a judgment obtained in favour of the Governor, though afterwards reversed in the Superior Court in consequence of a Writ of Error.'

" With respect to this fourth article ; the Lords of the committee do humbly report to your Majesty, That it appears in evidence to have been the constant practice, when any of the standing Justices of the Court were interested in any suit there depending, either by being related to any of the parties, or otherwise, for special Judges to be appointed ; that there were other causes depending at the same time in the Inferior Court of Common Pleas, wherein the standing Justices were either interested or a-kin to the parties ; and there is no proof that the special Judges were appointed on account of the particular cause wherein the Governor was concerned ; but by many depositions, and particularly by the deposition of the defendant in the said cause, it appears that the special commissions were solicited in the common form and manner as is usual in the Province of New-Hampshire ; and the question debated in the said cause, being a mere collateral question, not respecting the merits of it, was determined three times for the defendant in the Inferior Court ; but being determined a fourth time for the plaintiff, a Writ of Error was brought into the

Superior Court, and was finally determined there for the defendant : And the defendant in the said cause swears, that he, neither at that time, nor since, had any objections either to the said commissions, or to the Justices therein named and appointed, or to either of them.

“ And as to what is submitted in the said representation of the Lords Commissioners for trade and plantations, ‘ That the Governor omitted, from the commencement of his administration, to transmit the journals of the Council as a Council of State ;’

“ The Lords of the Committee do humbly report to your Majesty, That this practice was begun in the late Governor’s time ; who acquainted the proper officer, on his delivering a copy of the said journals in the month of June, 1760, that he need not give himself the trouble to make out such copies for the future, without his special directions ; and from that time the practice has been discontinued both by the late and present Governor. But the Lords of the Committee are of opinion, that it may be proper to revive that practice, and to have a regular transmission of such copies to the Lords Commissioners for trade and plantations.

“ Upon the whole, therefore, the Lords of the Committee submit it to your Majesty, THAT THERE IS NO FOUNDATION FOR ANY CENSURE UPON THE SAID *JOHN WENTWORTH*, ESQ. YOUR MAJESTY’S GOVERNOR OF NEW-HAMPSHIRE, FOR ANY OF THE CHARGES CONTAINED IN MR. *LIVIUS*’S COMPLAINT AGAINST HIM ; whose general conduct, in the administration of affairs within your Majesty’s government of New-Hampshire, is represented to have tended greatly to the peace and prosperity of the said Province.’

His Majesty, taking the said report into consideration, is pleased, with the advice of his Privy Council, to approve thereof, and to order, as is hereby ordered, That the said complaint of the said Peter Livius be dismissed this board. And his Majesty doth hereby further order, That the Governor, or Commander in Chief of the Province of New-Hampshire, for the time being, do not fail, on any pretence whatever, punctually and regularly to transmit to the Lords Commissioners for trade and plantations, authentic copies of the journals of the Council, as a Council of State.

Signed,

G. CHETWOOD.

No. XIX.

Extract of a Letter from Governor WENTWORTH, to the Earl of DARTMOUTH, dated New-Hampshire, 8th of June, 1774.

[This and the following Letters are taken from the Parliamentary Debates, 1775.]

IN my letter No. 59, I had the honour to write to your Lordship, that the General Assembly of this province stood prorogued to the 10th of May, at which time they met and proceeded upon business. I took great pains to prevail on them not to enter into any extra Provincial measures, yet one of the members for Portsmouth read in his place the inclosed letter, No. 1, to the committee of correspondence of Portsmouth, but the House then declined considering it. On Friday, 27th of May, it was moved to appoint committees of correspondence, and after a warm debate, carried by a majority of two only: The next morning it was reconsidered, and carried by a majority of one only, and passed as by the inclosures No. 2, and 3. Immediately after this,

the supply bill was passed and sent up to the Council, being withheld, as I imagine, for time to effect the other measure. I directly adjourned the Assembly, and kept them under short adjournments till this day, in hopes to obtain a suspension of these votes ; but finding there were two letters in town for the speaker, which, some of those who were most active, said, were to appoint a Congress of the Colonies, I considered it to be improper to admit their proceedings, and therefore immediately put an end to the committees (who have not as yet wrote or acted) and to the Assembly, by a dissolution in a message (No. 4, herewith transmitted) cautiously expressed, in such general terms, as to prevent any misrepresentations. The mode of dissolution after such short adjournments, which are attended by a few members, precluded any meeting of those persons to contrive undesirable measures, or pursue those in their private capacity, that were attempted as an Assembly, which has extremely disconcerted, and I hope will counteract, the efforts of those who strive to lead this Province into combinations with the Massachusetts-Bay. Before the dissolution, all the usual and necessary business of the Province was completed, that no detriment can arise from my delaying to call an Assembly, in expectation that a few weeks will convince those who may be members, of the imprudence and error of measures that tend to weaken or subvert the subordination of the Colonies.

No. XX.

Extract of a Letter from Governor WENTWORTH to the Earl of DARTMOUTH, dated New-Hampshire, 4th July, 1774.

ON the 25th of June, at night, arrived here the Grosvenor mast-ship, from London, with 27 chests of bohea-tea, consigned to a merchant in

Portsmouth ; sometime before the arrival of the ship, it was reported that a quantity of bohea tea was expected. Hereupon I took effectual precautions to counteract the universal disquiet of America from contravening the acts of Parliament in this instance, or destroying the property. By my desire the consignee wrote a letter to the master of the ship, with directions how to proceed on his arrival. This letter I gave to captain Cochran of his Majesty's castle William and Mary, who effected my orders in delivering it at sea. The 26th, being Sunday, nothing was done. On the 27th the merchant and master went early to the custom-house, and entered the ship and cargo. At noon-day the ship's boats came to the wharf with twenty-seven chests of tea, carts were prepared, and the tea immediately carried to the custom-house, and there stored, before any people could assemble to obstruct it. The town not suspecting any movement until my return from Dover, about ten miles off, where I purposely staid during this first operation to secure this event, which I foresaw would be carried quietly, by withdrawing suspicion, having confided my plan to proper magistrates, who I knew would not be disappointed. In the afternoon a town-meeting was convened upon the occasion. I came to town and passed on horseback through the concourse, who treated me with their usual kindness and respect. At the meeting, it was represented to the people, that the tea being now lodged in the custom-house, the question was totally changed, that nothing could be done, but by consent of, and agreement with the merchant. The meeting proceeded with coolness and temper beyond almost my hope. It was proposed that a committee should be chosen, and invested with powers to treat with the merchant. In this committee of eleven, were many principal gentlemen,

discreet men, who I knew detested every idea of violating property : Men disposed to prevent mischief. The town also chose a guard of freeholders, to protect and defend the custom-house and the tea from any attempt or interruption, which being sincerely intended, was faithfully executed. On the 28th, the consignee accepted and agreed to the proposals of the committee, to export the tea to any market he chose, upon condition the town should re-ship and protect it while in the harbour. This they gladly acceded to, and the town upon adjournment confirmed the proceedings ; accordingly the committee and the consignee together were at the custom-house, where the duty was openly and regularly paid, and the tea again carted through the streets publicly in the day time, without noise, tumult, or insult. About 9 o'clock P. M. three overheated mariners (two of them strangers) endeavored to excite a mob, to destroy the tea and vessel hired to export it. Whereupon I sent for Colonel Fenton, who gathered a few gentlemen, repaired to the vessel, and with laudable spirit and prudence they personally guarded both vessel and cargo in safety till the next morning. On the 29th, A. M. the Comptroller of the Customs informed me, that these mariners had got drums, and were assembling thoughtless people to destroy the tea and sloop. At the same time I received a letter, No. 1, a copy herewith inclosed, from the consignee, desiring my aid and assistance, to take possession of the sloop and cargo. Hereupon I directed the sheriff instantly to summon the Council, and every Magistrate and peace-officer to meet me forthwith on the wharf where the vessel lay, determining to disperse any riotous attempts, and order the vessel to the castle : While I was going out on

this my duty, a messenger came to tell me, that some magistrates and two of the council, Mr. Warner and Mr. Rindge, who happened to be in the way, hearing the noise, had repaired to the place, and, with many other freeholders, silenced the drums, and prevailed on the people to disperse without any outrage. At this time I received a second letter (No 2, herewith) from the consignee, to the same purport as the first. I lost no time in writing an order to captain Cochran, immediately to take possession, defend, protect, and safely deliver the said vessel and cargo to the merchant, or to his orders ; and the sheriff, John Parker, Esq. to take command of the castle in his absence, as will appear fully by the inclosure, No. 3. In the evening, about half past 6, observing the wind to be contrary, I dispatched a second order to captain Cochran, still to continue in the orders of the morning, as by the inclosure, No. 4. These orders were directly carried into effect, with a prudence and firmness that does honour to both the officers. On the 30th, the owner of the sloop, the master, and the supercargo, to whose care the consignee committed the tea, came on board, with proper custom-house clearances, and authority from the consignee. Captain Cochran examined the twenty-seven chests of tea, found them perfectly safe, and in good order ; desired the three last mentioned persons to examine the same, which they did, and then received both vessel and cargo into their possession, and forthwith sailed for Halifax. Mr. Parker the sheriff, and captain Cochran, returned to their respective duties, and have made return of their doings, on my orders, as in the inclosures, No. 5 and 6. During these transactions, viz. on the evening of the 27th, and morning of the 28th, I told the collector and comptroller, also the consignee, that if they wanted any aid

or assistance, or were apprehensive of danger, I was ready, whenever they would apply to me, and would not only issue orders, but in person defend them; that I was confident, the magistrates and freeholders would not desert me: But they would not apply, declaring they then apprehended no danger.

No. XXI.

Copy of a letter from Governor WENTWORTH to the Earl of DARTMOUTH, dated New-Hampshire, the 6th of July, 1774.

May it please your Lordship,

UPON hearing the committee of correspondence, chosen by the late Assembly of this Province, had issued letters to those members to meet this day in the Representatives chamber in Portsmouth, there to deliberate and act, particularly to choose delegates for a general American Congress, and that some of the said persons were convened. I have considered it to be my duty to his Majesty to use my endeavours to disperse and separate so illegal and unwarrantable an attempt. I have therefore convened his Majesty's Council, ordered the sheriff to attend me, and requiring their attendance on me, I went into the room, and immediately read the inclosed speech to them; afterwards I directed the sheriff to make open proclamation, for all persons to disperse and keep the King's peace, which was done before they had entered on any business, and I expect will be obeyed, as this letter must be forwarded by express 66 miles to Boston, and reach there to-night, in hopes to save conveyance by admiral Montague. Whatever further may occur, I shall take due care to transmit to your Lordship as

soon as possible, all which is most humbly submitted, dutifully hoping your Lordship's favourable representation of my best zeal, unremitted diligence and fidelity in discharge of my duty, may happily be honoured with his Majesty's approbation. I have the honor to be, with the most perfect respect, &c.

J. WENTWORTH.

No. XXII.

Extract of a Letter from the Honourable Governor WENTWORTH, to the Earl of DARTMOUTH, dated New-Hampshire, 13th July, 1774.

THE convention mentioned in my dispatch, No. 63, immediately dispersed, without attempting to enter into any measures. Those gentlemen with some others dined at a tavern, and there in private agreed to recommend to the several parishes in the Province, that they choose persons to meet at Exeter on the 21st instant, for the purpose of appointing delegates to attend, and be part of an American Congress, intended to assemble the 1st of September next, in Pennsylvania or New-Jersey. The towns were desired to collect voluntarily, and send by their agents to Exeter, certain sums of money in proportion to their province-tax, amounting to three hundred pounds sterling, to pay the delegates. It was also recommended to the parishes, that the 14th instant be observed as a day of fasting and prayer. It is yet uncertain how far these requisitions will be complied with; but I am apt to believe the spirit of enthusiasm, which generally prevails through the colonies, will create an obedience that reason or religion would fail to procure.

No. XXIII.

Extract of a Letter from Governor WENTWORTH, to the Earl of DARTMOUTH, dated New-Hampshire, August 29th, 1774.

SINCE my letter, No. 64, the convention of persons chosen by many towns, in consequence of the invitation in that letter referred to, met at Exeter, and elected Col. Folsom and Major Sullivan to be delegates for this Province, at the Congress to be held in Philadelphia, on the first day of September next. The paper, No. 1, herewith inclosed, is a copy of the instructions given to those gentlemen, and is the best explanation of their service and employment that I can obtain. I am informed that this convention collected and brought from their respective towns, about one hundred and twenty guineas, which was paid into the hands of John Giddinge, Esquire, (who they elected Treasurer) to defray the expense incurred by the delegates afore-named, who set off on their journey to Philadelphia, on the 10th instant.

The committee of correspondence elected by the late Assembly, and of course dissolved with them, wrote circular letters to all the towns in this Province, copy of which, and printed form of the non-importation and non-consumption agreement, recommended in that letter and accompanying it, are herewith transmitted, No. 2. Some few towns generally subscribed, many others totally rejected. The committee appear conscious that their powers (if any they ever had) ceased with the Assembly that elected them; for they do not date the day of the month, because it succeeded the dissolution; it is certain they had not acted, nor even met together before that.

I think this Province is much more moderate than any other to the southward, although the spirit of enthusiasm is spread, and requires the utmost vigilance and prudence to restrain it from violent excess; this will appear by the inclosure, No. 3; which was carried *nemine contradicente* in this town, upon an attempt some few nights preceding, by a parcel of boys and sailors, to insult a woman who sold tea. Since this vote, the town has been perfectly quiet, those who had tea have sold it without molestation. The inhabitants have now almost universally discontinued the use of Bohea tea, and I apprehend will entirely within three months of this date.

The town-clerk of Boston, who is said to be a zealous leader of the popular opposition, has been in this town about a week; immediately appears a publication in the New-Hampshire Gazette,* recommending donations for Boston, which has been followed by a notification to convene in town-meeting 'to grant relief to the poor of the town of Boston,' on the 12th of September next. It is probable no town grant will be made, and the meeting issue in appointing a committee to receive and transmit voluntary donations, which I believe will not afford much comfort to them, or greatly credit the charitable munificence of these town-meetings; grants are always and ever will be greater on popular preferences than private subscriptions, because those that vote in public pay by far the least part of the grant; as is ever the case with select men, who having power over the apportionment of rates, probably do not exercise it to their own detriment, and thence more easily join in facilitating and augmenting such gifts, which, from the nature of the office, they have

* The publication here referred to was written by a person whom the Governor did not suspect, and the town clerk knew nothing of it.

great influence upon. It is greatly to be wished, that gentlemen of property, experience and education, could be persuaded to accept the office of select men ; but it is impracticable, if they are disinterested, and without other views than the public good, it is very laborious and unprofitable employment : And as I have nothing in my power whereby to reward such good men, they all decline, and the interior regulation of the capital falls into the hands of those who can submit to make it worth their attention.

I beg leave to assure your Lordship of my most faithful diligence in his Majesty's service ; and, with the greatest deference, to hope for such favourable representation thereof.

I am, &c.

J. WENTWORTH.

P. S. The inclosure, No. 4, met with very little encouragement, and obtained but few signers (except two or three) who were only among the lower order of people, who signed before they were divided to, and on the same invitation would sign any other paper.

J. W.

No. XXIV.

Extract of a Letter from Governor WENTWORTH to the Earl of DARTMOUTH, dated New-Hampshire 13th September, 1794.

ON the 8th instant, about sun-set, arrived in the port of Piscataqua the Fox mast-ship, having on board 30 chests of bohea tea, consigned to Mr. Edward Parry of this town. Previous to this arrival it had been reported that such an event was expected : I therefore early instructed captain Cochran of his Majesty's castle, William and Mary, in

this Province, to render all the aid and assistance in his power upon the first application, as by the copy, No. 1, which I beg leave to inclose to your Lordship herewith. Accordingly captain Cochran, always indefatigable in his duty, went off to the ship while at sea and proffered his service. Some few days before this arrival, letters were received from London, mentioning the shipping of the tea, to sundry persons, whence it became very publick. A ship last week arrived at Salem with a quantity of tea on board, also confirmed the expectation of the like here. These things, added to a report from Salem that the people would not admit the tea to be landed, entered, or pay the duty there, and the enthusiastic spirit of that Province daily gaining ground both there and here, notwithstanding my utmost efforts and vigilance, rendered the event of this importation more precarious than the former, and raised almost insurmountable obstacles against its preservation.

As soon as it was generally known that tea was arrived here, the disquiet broke forth among the populace, and at a quarter past ten at night I received a letter, No. 2, from Mr. Parry, informing of his windows being broken by a mob, and desiring protection. At half past ten I sent Mr. M'Donah, my private Secretary, and my brother, who happened to be at my house, to inquire of Mr. Parry what was necessary, and, if any danger, to offer him the protection of my house, which they did; but the attempted mob having subsided, he saw there was no danger, and remained quietly and safely in his own lodgings. At three quarters past 9 A. M. of the 9th instant, Mr. Parry brought me a petition to the Governor and Council, praying the protection of government, as in the inclosed copy, No. 3. Whereupon I convened the Council within an hour,

and received advice from them to call in the Justices that were in town, and require their execution of their duty; which they, with laudable prudence and firmness immediately proceeded upon, and with desirable success.

Mr. Parry and Captain Norman were informed of these proceedings, and by me told at the Council Board, that the Governor, Council, and Magistrates, would, upon the least notice, support and protect them and their property, and that we should all be in readiness. At six P. M. I adjourned till nine o'clock next morning, and sent for the Chief Justice, Sheriff and Attorney-General, from Exeter, where the Superior Court was and is sitting. Also Mr. Gilman and Waldron from Exeter and Dover, to make a full Council. That nothing might be wanting to execute the law, and preserve the public peace, the Council sat till two o'clock; and no further application made nor any appearance of riot or violence whatever. I proposed to the Council to consider and advise me what further was needful to be done upon the petition; this was referred to a committee to report upon, and I adjourned till Monday, the twelfth instant, ten o'clock, A. M.

During this period, viz. the 9th and 10th instant, the town meetings were agitated. At length a committee were chosen to consult with Mr. Parry and the Captain, who agreed to export the tea to Halifax, after being duly entered, and paying the duty. About five o'clock P. M. of 10th, Mr. Parry and Captain Norman came to me, and informed me of this agreement, and that they were obliged to the government for their protection, which they imagined was no longer necessary on this occasion. However, I judged it prudent to meet the Council on the adjournment, and to have the Council convened again in the afternoon, as there was a town

meeting fitting, and I could not be certain of established quiet 'till that was over. The vessel with the tea sailed the 11th instant, with a fair wind, for Halifax, and the town is in peace. The whole proceedings of Council affair I beg leave herewith to transmit to your Lordship in the paper No. 4.

Notwithstanding, I can still have the pleasure to represent to your Lordship that this Province continues more moderate than any to the southward ; yet, at the same time, truth requires me to suggest, that the union of the colonies in sentiment is not divided nor lost in New-Hampshire, although they have hitherto been prevailed upon to abstain from acts of general violence and outrage, and the laws have their course. How long it will remain so is impossible to foresee ; I confess much good may not reasonably be counted upon, while the unhappy distractions in the Massachusetts bay gain ground and spread with such violence as cannot but be extremely deplored by every considerate man.

No. XXV.

Extract of a Letter from Governor WENTWORTH to the Earl of DARTMOUTH, dated New-Hampshire, 15th November, 1774.

AT an adjournment of a town meeting in Portsmouth, in October last, fifty-two voters reconsidered a vote of fifty-six voters in a previous meeting, "not to grant the town monies for a donation to Boston ; but that a voluntary subscription be opened for that purpose." This lesser number granted two hundred pounds proclamation money, which is near four times their Province tax.

They also proceeded to choose a committee of forty-five persons, chiefly out of the number then

present, who stile themselves, "A Committee of Ways and Means." I hear one half the number refused to act. The remainder convened together, and prevailed on Mr. Wentworth, an old gentleman of seventy-eight years, and lately extremely impaired by frequent epileptic fits, to be their chairman. General Gage having desired me to furnish some carpenters to build and prepare quarters for his Majesty's troops in Boston, the carpenters there being withdrawn, and the service much distressed ; I immediately engaged and sent him a party of able men, which arrived to the General, and are very useful. However, this committee considered it as very obnoxious, and chose a sub-committee from among their acting members, to draw up resolves relative to this matter, which I am informed they did, and were accordingly published in the inclosed New-Hampshire Gazette, No. 940, which excited the designed madness through the interior part of the Province, and solely gave rise to the proceedings at Rochester, as published in the Gazette, No. 942, herewith transmitted. Indeed, had not the Rochester committee acted with great prudence, and consented to call Mr. Austin before them, it is greatly to be apprehended very essential outrages would have been committed on his estate, and his person endangered through the violence of a deluded populace. From these motives only were those three gentlemen in Rochester prevailed on to act in a business the whole of which they publicly disapproved, but had not power to suppress. During these agitations Captain Holland, by desire of Brigadier General Robinson, had purchased some blankets for the army. The committee forbade him to ship any, and he immediately sent them all to my house for safety, whence I directly shipped them for Boston, and they are safely delivered. In

the counties of Hillsborough and Cheshire I have heard there have been several reprehensible violences committed, under popular pretences of liberty ; nevertheless I took such measures, that, I am informed by the magistrates of those counties, the difficulties begin to subside. But I cannot flatter myself with any reasonable hopes of the legal establishment of the powers of government in this Province, until they are effectually restored in the Massachusetts Bay. I have been successful in prevailing on soldiers deserted from the King's troops at Boston, to return to their duty, through the spirited and prudent activity of Major Thompson, a militia officer of New-Hampshire, whose management, the General writes me, promises further success. The town of Exeter have followed the example of Portsmouth, and granted one hundred pounds to Boston, and I apprehend many other towns will do the like.

No. XXVI.

Extract of a Letter from Governor WENTWORTH, to the Earl of DARTMOUTH, dated New-Hampshire, December 2, 1774.

THE forming a Continental Congress was so universally adopted by the other Colonies, that it was impossible to prevent this Province from joining therein, and accepting the measures recommended, which are received implicitly : So great is the present delusion, that most people receive them as matters of obedience, not of considerate examination, whereon they may exercise their own judgment. Accordingly on their first publication, the acting part of the committee mentioned in my dispatch, No. 69, forbade an exportation of fifty sheep, the adventure of a ship-master, bound to the

West-Indies, and caused him, at some loss, to dispose of his sheep, and unlade the provision made for them.

This day the Provincial committee nominated at Exeter by the electors of the delegates to the Congress, have published their mandate, herewith enclosed, for a general submission to the resolves of the Congress, signed by their chairman, who was speaker in the late General Assembly.

It is much to be wished the Colonies had pursued the mode of representation your Lordship is pleased to mention. At present, I apprehend, the respective Assemblies will embrace the first hour of their meeting, formally to recognise all the proceedings of the Congress, and if they should superadd, it will not probably be less violent than the example which will be their foundation.

No. XXVII.

Copy of a Letter from Governor WENTWORTH to Governor GAGE, dated 14th of December, 1774.

Portsmouth, New-Hampshire:

SIR,

I HAVE the honor to receive your Excellency's letter of the 19th inst. with the letter from the Secretary of State, which were both delivered to me on Monday evening last by Mr. Whiting.

It is with the utmost concern I am called upon by my duty to the King, to communicate to your Excellency a most unhappy affair perpetrated here this day.

Yesterday in the afternoon, Paul Revere arrived in this town, express from the committee in Boston to another committee in this town, and delivered his dispatch to Mr. Samuel Cutts, merchant of this

town, who immediately convened the committee of which he is one, and, as I learn, laid it before them. This day before noon, before any suspicions could be had of their intentions, about four hundred men were collected together, and immediately proceeded to his Majesty's Castle, William and Mary, at the entrance of this harbour, and forcibly took possession thereof; notwithstanding the best defence that could be made by Captain Cochran (whose conduct has been extremely laudable, as your Excellency will see by the enclosed letter from him) and by violence carried away upwards of 100 barrels of powder belonging to the King, deposited in the castle. I am informed that expresses have been circulated through the neighbouring towns, to collect a number of people to-morrow, or as soon as possible, to carry away all the cannon and arms belonging to the castle, which they will undoubtedly effect, unless some assistance should arrive from Boston in time to prevent it. This event too plainly proves the imbecility of this government to carry into execution his Majesty's order in Council, for seizing and detaining arms and ammunition imported into this Province, without some strong ships of war in this harbour: Neither is the Province or custom-house-treasury in any degree safe; if it should come into the mind of the popular leaders to seize upon them.

The principal persons who took the lead in this enormity are well known. Upon the best information I can obtain, this mischief originates from the publishing the Secretary of State's letter, and the King's order in Council at Rhode-Island, prohibiting the exportation of military stores from Great-Britain, and the proceedings in that Colony in consequence of it, which have been published here by

the forementioned Mr. Revere, and the dispatch brought, before which all was perfectly quiet and peaceable here. I am, &c.

(Signed) J. WENTWORTH.

No. XXVIII.

Copy of a Letter from Captain COCHRAN, Commander of Fort William and Mary, in New-Hampshire, to Governor WENTWORTH, dated the 14th of December, 1774.

May it please your Excellency,

I RECEIVED your Excellency's favour of yesterday, and in obedience thereto kept a strict watch all night, and added two men to my usual number, being all I could get. Nothing material occurred till this day one o'clock, when I was informed, there was a number of people coming to take possession of the Fort, upon which, having only five effective men with me, I prepared to make the best defence I could, and pointed some guns to those places where I expected they would enter. About three o'clock the Fort was beset on all sides by upwards of four hundred men. I told them, on their peril, not to enter: They replied they would. I immediately ordered three four pounders to be fired on them, and then the small arms, and before we could be ready to fire again, we were stormed on all quarters, and they immediately secured both me and my men, and kept us prisoners about one hour and a half, during which time they broke open the powder-house, and took all the powder away except one barrel, and having put it into boats and sent it off, they released me from my confinement. To which

can only add, that I did all in my power to defend the fort, but all my efforts could not avail against so great a number. I am your Excellency's, &c.

(Signed)

JOHN COCHRAN.

No. XXIX.

Copy of an Extract of a Letter from Governor WENTWORTH, to Governor GAGE, dated Portsmouth, New-Hampshire, the 16th of December, 1774.

ON Wednesday last after twelve o'clock, an insurrection suddenly took place in this town, and immediately proceeded to his Majesty's castle, attacked, overpowered, wounded and confined the Captain, and thence took away all the King's powder. Yesterday numbers more assembled, and last night brought off many cannon, &c. and about sixty muskets. This day the town is full of armed men, who refuse to disperse, but appear determined to compleat the dismantling the fortrefs intirely. Hitherto the people abstain from private or personal injuries ; how long they will be so prevailed on, it is impossible to say, I most sincerely lament the present distractions which seem to have burst forth by means of a letter from William Cooper to Samuel Cutts, delivered here on Tuesday last, P. M. by Paul Revere. I have not time to add further on this melancholy subject.

P. S. The populace threaten to abuse Colonel Fenton, because he has to them declared the folly of their conduct, and that he will do his duty as a justice in executing the laws. They will never prevail on him to retract, if all the men in the Province attack him. If I had had two hundred such men, the castle and all therein would yet have been safe. At this moment the heavy cannon are not carried off, but how soon they may be, I cannot say.

No. XXX.

The publication in the New-Hampshire Gazette referred to in No. XXIII.

TO THE INHABITANTS OF THE PROVINCE OF NEW-HAMPSHIRE.

Remember them that are in bonds as bound with them, and them that suffer adversity, as being yourselves also in the body.

Let us consider one another to provoke to love and to good works.

MY DEAR BRETHREN,

OUR late House of Deputies, which met at Exeter, having recommended it to the several towns in this Province, to consider the distressed situation of our poor oppressed Brethren in Boston, who are suffering the rigour of a cruel and unjust act of Parliament which deprives them of the means of subsistence for an indefinite time, and lend them what help we can afford, to support them in their sufferings : I beg leave to lay before you some considerations, which may serve to shew you not how much they *need* (for that your own humanity must inform you) but how much they *deserve* your assistance.

The people of that Town and Colony have ever been remarkable for their humanity and generosity to the distressed. Their bounty has been extended to Jamaica, Nevis, Carolina and other places which have suffered by fires, hurricanes, earthquakes and other calamities, yea, London itself has experienced their kindness, when by the fire in 1666, great numbers there were reduced to poverty. To their tender and benevolent hand *this Province* in particular is greatly indebted if not for its existence, yet certainly for its protection and support, both in matters of civil government and in the furious Indian Wars during those forty years we were united to

that Colony. The settlements here must have been broken up had we been left to stand alone, vexed as we were by intestine divisions and the want of an orderly government, labouring under poverty, and attacked by a savage enemy whose tender mercies were cruelty. The sense of their kindness was most gratefully expressed in a letter written by President Cutts and his Council in 1680, to that Colony; upon the separation which then took place by the King's Authority. And since that time, every one that is acquainted with the state of this Province, knows that it owes much of its importance to the neighbourhood of the Massachusetts government.

Though the Town of Boston have themselves suffered greatly by fires, and by the frequent spreading of the small pox among them, yet they have always been at a prodigious expense in supporting the poor, most of whom are not natives of the place, but strangers, who have fallen in among them. For several years past, as I have it from the best authority, their annual poor's bill has amounted to about two thousand pounds sterling; besides which, there is a voluntary quarterly contribution for the poor at a public evening-lecture in Faneuil-Hall.

Distressed persons of all sorts have ever found Boston the best place to go to for relief. Prisoners of war have there found the kindest treatment, and returned captives have been received with the tenderest commiseration. Mr. Williams of Deerfield, in the narrative of his captivity, bears them this testimony, 'The charity of the whole country of Canada, though moved with the doctrine of merit, does not come up to the charity of Boston alone, where notions of merit are rejected.'

Now, shall such a people as this suffer unpitied, unassisted? He who hath established this rule 'The liberal deviseth liberal things, and by liberal things

‘ he shall stand,’ has disposed the hearts of our brethren in the southern Colonies to contribute handsomely already, and when the crops come in, we expect they will do much more. And shall not we, though our ability is but small in proportion to theirs, do what we can to enable our brethren, who are foremost in the conflict, to maintain the cause in which they are engaged, by a firm and manly perseverance? Will not such communications of charity strengthen the bonds of society, and endear us to each other? And when a firm union is thus cemented, happy in our mutual affection, in the increased cultivation of our lands, in our frugality and economy, we shall securely bid defiance to all the enemies of our peace, and leave this land of LIBERTY a sacred legacy to posterity.

‘ *Terra—potens armis, atque ubere glebæ.*’

AMICUS PATRIÆ.

No. XXXI.

On the migration of Fishes. - A letter from the Hon. General LINCOLN to the Author.

Hingham, Dec. 12, 1791.

Reverend and dear Sir,

SINCE I saw you last, I have found some parts of the copy of a letter I wrote to Mr. Little, with a design to convince him, that the river fish never forsake the waters in which they were spawned, unless some unnatural obstructions are thrown in their way: That when obstructed, they do not seek new sources in which they may lodge their spawn; but that they are so strongly allured to the same rout, that they annually return to their natural river, pressing constantly for a passage into their mother

pond. That the quiet waters of the lake can alone give that nourishment and protection necessary to the existence of the egg ; the preservation of which is indispensable, if an extinction of the schull is to be prevented.

The practice is not novel in this State, when from some unnatural obstructions, the fish have been totally expelled from a river, to re-establish them in their former numbers. About fifty years since, it was known, that at the first settlement of this town, the Alewives had a passage through it, into Accord pond, and were in such plenty as to give a full supply to the inhabitants. This induced the people at that time to attempt the re-establishment of them, in which they succeeded by opening proper fish ways through the mill dams, and conveying the fish, in the spring of the year, in a proper vehicle into the pond ; this was done by keeping it near the bank of the river, and frequently shifting the water in the vessel. After this, the fish increased annually until there was a pretty good supply ; but as there were many shoal places in the river, which required very constant attention, the expense of which and the loss sustained by stopping the mills, exceeded, in the opinion of the town, the advantages of the fish, the business was neglected ; so that for a number of years they have been perfectly cut off from the pond. Notwithstanding some of the fish annually return to the mouth of the river urging a passage up ; but they are decreased in number and reduced in size.

We shall find on examination, that the fish though of the same kind, in one river are much larger and fatter than in any other river in its vicinity. If these fish were suffered to intermix, the difference now so very apparent would not exist. If the fish are not directed by some laws in nature, to the riv-

ers in which they were spawned, how shall we account for the Salmon being in Connecticut river; and in Merrimack, and the rivers lying between, perfectly destitute of those fish? Was there not something irresistibly enchanting, in the waters in which they respectively originated, we should probably find some straggling salmon in the intermediate rivers.

Whilst I resided in Philadelphia in 1782 and 1783, I discovered that the Shad brought to market from the Schuylkill were about one third part better than those taken in the Delaware. These fish come up the bay together in the spring, and take, each schull its proper river, about five miles below the city; they are caught but a few miles above it, so that in a few hours after they divide, they fall into the nets of the fishermen. Were there not something in the nature of the waters of these rivers, by which the fish are allured to them respectively, we certainly should find the fish in the different rivers exactly alike, for we cannot suppose that they experience any material change between the time of their separation and the time of their being caught. As the Shad taken in the Schuylkill are and always have been of a much superior quality to those taken in the Delaware, we must suppose that there is, in the river first mentioned, food for the fish more nutritive than there is in the latter. I cannot think it a very romantic idea, that the waters are so impregnated with certain particles which shall be sufficient to allure the fish to those rivers in which they were spawned, or that they are invited to them by the returning fry, on which they have been accustomed to feed. That they do feed differently, some on food more nutritive than others, cannot be denied; to this is owing the different size of the fish. They

leave the rivers under different circumstances, and so return to them again.

The shad and alewife frequent the same waters in which they drop their spawns. The shad, prior to this, work up a little circular sand bank; on which the spawns are lodged, and are guarded from that destruction to which they would be exposed from the small fish, did not the male constantly play around the deposit. While the eggs or spawns of the alewife are secured by being deposited in shoal water, which prevents their being annoyed by the large fish.

The idea that fish always return to the same rivers in which they are spawned, will not appear improbable when we consider what are the general laws which seem to controul the whole finny tribe; and what would be the probable consequences should they be thrown down.

On the shores of the United States we find fish of different kinds, each supplying a certain proportion of the inhabitants. These are restrained by some laws in nature to their own feeding ground; they do not invade the rights of others, nor are their rights infringed by any. New-York is in the neighborhood of Rhode-Island, and that State is in the neighbourhood of this, yet each State has a very different fish-market. So it is with Pennsylvania and the States south of it. Notwithstanding this, all are supplied, and with kinds of fish peculiar to each. The Cod-fish which occupy the banks lying between the latitudes of 41 and 45, are very different on the different banks, and are kept so distinct, and are so similar on the respective banks, that a man acquainted with the fishing business, will separate those caught on one bank from those caught on another, with as much ease as we separate the apple from the pear.

It will be acknowledged that there can exist but

a certain number only of fish in any given space ; was not this the case, as they are so prolific in their nature they would, from their natural increase, soon so multiply, as that the world, if I may be allowed the expression, would not contain them.

On the banks there appears nearly as many fish as ever, notwithstanding the great numbers annually taken. The grand bank was, three years ago, manifestly overstocked, there were more fish on it than could find support ; those taken were evidently on the decline, they were very thin, the substance tender ; it could not be hardened and preserved by salt ; many of them would yield before the knife in splitting and fall to pieces before they could be conveyed to the flakes. The cause is not known, probably the spawns of that season were better preserved than they had usually been.

Were those restraining laws of nature, which now confine the different schulls of fish to their own limits, thrown down, and all could wander without controul there would be the most imminent danger of a total destruction of nearly the whole kind, as well in the rivers as on the banks, for, as was said before, there can but a certain number exist in a given space.

Permit me farther to request, in support of the doctrine advanced, an attention to that system and order so conspicuous in the operations of nature, and the great regularity preserved among the things of creation, animate and inanimate, by that Wisdom which made and governs the world.

Let us take a view of the different nations dispersed over the face of the earth, by Him who originally fixed bounds to the habitations of men, and as a restraint to them, and that each tribe should retain its own limits, he gave to each nation a different lan-

guage: We find the different nations and tribes, though possessing very different climates, and if we were to judge, enjoying the means of different degrees of happiness, severally tenacious of the limits assigned them, and where a God is acknowledged, they very sincerely and universally thank him that they are favoured above their fellow men.

Was it not for the superintending care, and the influence of the Governor of the universe, who scatters in the paths of men such motives as fall with weight and conviction on their minds, and lead them to prefer their climate above any other, no inhabitants would be found in the burning sands under the torrid, nor on the frozen cragged mountains under the frigid zones: We find however under each, multitudes of people, who are so fitted for their respective situations, that they are not only happy, but are really partial to the place assigned them, and envy not the dominion of others, and seldom or never invade them, but from motives of avarice, pride and ambition.

We find that the people who inhabited the American shores on the first discovery of them, were divided into little kingdoms or tribes, each speaking a different language, *and were enemies one to the other*; hence they were preserved from famine and want, for they depended principally upon the spontaneous growth of the earth, and upon fishing and hunting for their support. Whatever kept them asunder was an act of *mercy*; with their ideas, they could not have lived compactly, ruin must have been the necessary consequence of the attempt.

What short of that influence necessary to preserve the natural order of things, could have prevented mankind from abandoning the more inhospitable parts of the globe, running together and uniting in

climes the most friendly and pleasant, and much the greater part of them becoming thereby their own executioners. Although from an high cultivation of the earth, food may be drawn for a great multitude of people, yet population cannot exceed certain bounds ; whenever that takes place, the salubrity of the air is destroyed, contagion rages, the people sicken and die.

Let me now point you to the birds of passage, and ask that you would permit your ideas to follow them in their flight from south to north, in spring, and from north to south, in autumn, and you will find that they are annually pointed to the same objects, and are as constant in their flight and as regular in their course as are the seasons. We may, at a particular time of the year, trace the swallow into its hiding place, and the robin and the lark to the forests, where they retire for shelter from the inclemency of an approaching winter, and see them in the morning of spring returning to the same habitations and branches, and often to the same nests they occupied before, and which from necessity they had abandoned. Different fowls, natives of different climes, are so fitted to their native air, that many of them cannot exist out of it.

The rattle snake, the most poisonous reptile in this part of the country, is circumscribed in his limits, and cannot exist beyond a certain degree of northern latitude, nor can he be transported across the Atlantic. By what laws in nature he is restrained we know not ; that he is restrained is a fact, and is not known in one part of this Commonwealth while much dreaded in another. The same restraint lies on different reptiles in the southern States, and though one part are in a degree endangered by them, yet others are perfectly free from their poi-

fonous stings. These animals, necessary on the whole, as are the flies, which multiply in proportion to the impurity of the air by which they are surrounded, make a part of the great whole, and have, I doubt not, a benevolent commission, in the execution of which the happiness of man is materially concerned.

Beasts of the most ferocious kind, necessary in the chain, are peculiar to certain climates, and are the least dreaded where most known: A belief that they will not exceed the limits assigned them, prevents their giving terror to others; while those of a different kind serve for our use, are fitted to live in the various climates in which they have been placed, and seem, by some instinct of nature to be perfectly submissive; and are bound with much ease to the limits assigned them.

When we take a view of the whole of the order established originally, and which has been preserved in the world; when we see man dispersed over the face of the earth, and an evident design that he should remain so dispersed, and when we behold, that in consequence thereof, care has been taken that under every circumstance of civilization, or barbarism, a full supply of food can be obtained by each, in a way best fitted to themselves; when we see the birds of passage, anxious to perform their part, and (which is important indeed to some of the inhabitants in the higher latitudes) taught to fly in winter to climes more friendly to their existence, and led back to nourish the waking Laplander, after a winter of retirement and sleep. When we see the care exercised towards man evinced in the existence of even the most poisonous animals, fitted to inhale the more subtil and pointed particles floating in air, which are too keen for our habits, and ob-

serve the irritating fly, busily employed in sipping the putrid matter, in the first stages of it, which otherwise would float incompatible with a salubrious atmosphere, necessary to our happiness. When we see the natural timidity implanted in the nature of the most ferocious animals, fleeing at the approach of man ; and the docility of those more immediately intended for our use. When we carefully review these things, and study with attention the works of nature, the great book of God, which if understood cannot mislead, and our minds are guided by proper considerations, we shall be freed from all anxious fears, lest one part of the system should clash with another, but instead thereof we shall find ourselves perfectly satisfied in the belief that each will occupy its own orb until the whole shall be dissolved.

I have little doubt in my own mind but that every river whose source is in a lake or pond, where the waters are quiet, might with great ease be replenished with some kind of fish or other. I think there was a time when they were filled. Could we succeed in this measure the advantages would be important, for it would multiply our cod and other ground fish about our shores, in proportion as we increase the small river fish, for they are the proper food of the ground fish, which in pursuit thereof, are allured quite into our harbours, and give us a more easy supply. We have undoubtedly been criminally inattentive to the propagation of the oyster in different parts of our shores ; we can probably fill our channels with these shell fish with much more ease than we can fill our pastures with herds and flocks.

I have a satisfaction in submitting these observations to you, which is seldom to be enjoyed, viz. that I shall receive a full compensation—one smile

will do it, that I am sure they will beget, for you must long since have been taught that we had better smile than weep at the vanity of others:

With esteem and affection,

I am always your friend,

Rev. Mr. BELKNAP.

B. LINCOLN.

No. XXXII.

On the same subject.

A letter from the Rev. DANIEL LITTLE, of Wells, to the Author.

Wells, Dec. 13, 1791.

DEAR SIR,

GENERAL LINCOLN'S letters contain many curious and pleasing arguments to prove that "river fish always return to the rivers and ponds where they were spawned." The thought was perfectly new to me, till I met with it, about three years ago in a manuscript of the General's, which I had the honour of perusing, and which gave rise to a correspondence on that and some other subjects. I wish your inquiries may occasion some useful publication on this head.

In the course of my information since, I have met with nothing that militates against the General's arguments; but rather the contrary.

Some time ago, I lodged at the house of Col. Baldwin of Woburn, and spent the evening with his aged father; who, in the course of conversation, informed me, that a canal was made, within the limits of his acquaintance, to extend the feeding ground of the river fish from one pond to another; but that

the fish never removed from their original and native pond; though the communication was short and the waters plenteous.

When in the county of Lincoln, the last summer, I spent several days among the people settled on the banks of the Sebasteecook, ten miles from its junction with the Kennebeck. The streams that fall into Sebasteecook are numerous, and abound with the small river fish, such as alewives, &c. The people say that at the time of the running of these fish, they ascend the streams at distinct periods in succession; and that the schulls never separate, interfere or transgress in their way to their respective ponds or lakes.

The fish ponds and the river fish might be greatly improved by removing the natural obstructions in some rivers and carrying into the distant ponds live fish to generate a new class. By that means new settlers might conduct the fish to the doors of the present and succeeding generations.

I am, dear Sir, your sincere friend and brother,
DANIEL LITTLE.

No. XXXIII.

ON POPULATION.

A Letter from the Rev. JAMES FREEMAN, [who had seen this work in manuscript] to the Author.

Boston, Feb. 29, 1792.

DEAR SIR,

THE principles, upon which you have calculated your Table of Population, for the State of New-Hampshire, appear to me not to be just. Supposing that the annual increase of inhabitants is

the same, you conclude that their number has doubled in less than nineteen years. It is said to be a good rule which works both ways. But if the number of people in New-Hampshire increased by the same ratio previous to the year 1767, it doubled in less than seven years; for diminishing 52700 by 3883, your mean number, it is reduced in the year 1760 to 25519. And, on the other hand, should the annual increase be no more in future than 3883, above six and thirty years will elapse before the inhabitants of New-Hampshire will be double the number they were in 1790.

The inhabitants of a country augment, as far at least as depends upon natural increase, in the same manner as a sum of money put out upon compound interest. A hundred pounds at 6 per cent. at the end of the year, become £106, which new principal, at the end of the second year, produces more than £6. Professor Wigglesworth, in his *Calculations of American Population*, has explained the manner of constructing tables, from which the annual increase of inhabitants, by natural population, may be estimated for a series of years, provided their number at the beginning and end of the series, be ascertained by actual enumeration, or by any other accurate mode.

The number of inhabitants in New-Hampshire in the year 1767 was 52700, and in the year 1790, 141885. Here we have the number ascertained at the beginning and end of a period of 23 years. Suppose 52700 to be equal to 1. Then we have this series in geometrical progression, as

$$1 : a :: a : a^2 :: a^2 : a^3 :: a^3 : a^4 \dots \text{to } a^{23}.$$

That is, As the number of inhabitants in the year 1767 is to their number in the year 1768, so is that

number to their number in the year 1769, and so on in the same proportion to the year 1790.

But $a^{23} = \frac{141885}{25700} = 2,692315$; the root of which or a is equal to 1,044001. By involving the value of a to its 23d power, we have the amount of unity to the 23d year; the index of the power denoting the particular year.

The value of a being thus involved we have the following:

TABLE I.
years amounts of unity

1768	1,044091 = a
1769	1,089939 = a^2
1770	1,137898 = a^3
1771	1,187967 = a^4
1772	1,240239 = a^5
1773	1,294812 = a^6
1774	1,351785 = a^7
1775	1,441126 = a^8
1776	1,473364 = a^9
1777	1,538194 = a^{10}
1778	1,605877 = a^{11}
1779	1,676538 = a^{12}
1780	1,750308 = a^{13}
1781	1,827324 = a^{14}
1782	1,907729 = a^{15}
1783	1,991672 = a^{16}
1784	2,079309 = a^{17}
1785	2,170802 = a^{18}
1786	2,266320 = a^{19}
1787	2,366042 = a^{20}
1788	2,470151 = a^{21}
1789	2,578842 = a^{22}
1790	2,692315 = a^{23}

If the number corresponding to any particular power of a be multiplied by 52700, the product will be the amount of the inhabitants of New-Hampshire, for the year denoted by the index of the power of a , and which in the table is placed in the same line. For example, if we multiply 52700 by 1,351785, which in the table is placed in the same line with 1774, the product, rejecting the decimal parts, will be 71239, which is a little more than one half of 141885. Consequently, upon the supposition, that the increase of inhabitants in New-Hampshire was uniform, during the period included in this table, it may be concluded, that their number was doubled in a little more than sixteen years.

But from the survey taken in the year 1775, it appears that the increase was not uniform. At that time the number of inhabitants in New-Hampshire, was found to amount to 82200, whereas, if it be calculated by the table, it will be no more than 74373.

It is evident therefore, that the augmentation of the people was more rapid between the years 1767 and 1775, than between the years 1775 and 1790. This difference can easily be accounted for. The late war undoubtedly checked the progress of population, as you have clearly shown.

To ascertain at what rate the inhabitants of New-Hampshire increased between 1767 and 1775, a period of 8 years, let us suppose, as before, 52700 to be equal to 1. Then $a^8 = 1,559772$, that is $\frac{81200}{52700}$, the root of which, or a , is 1,056928, which being involved to its 13th power, will give the amounts of unity as in the following :

TABLE II.

years	amounts of unity
1768	1,056928= a
1769	1,117098= a^2
1770	1,180692= a^3
1771	1,248908= a^4
1772	1,320007= a^5
1773	1,395153= a^6
1774	1,474577= a^7
1775	1,559772= a^8
1776	1,648568= a^9
1777	1,743418= a^{10}
1778	1,842669= a^{11}
1779	1,948012= a^{12}
1780	2,058910= a^{13}

From this table it is evident, that the people of New-Hampshire, if the progress of population had not been checked by the war, would have doubled their numbers in less than thirteen years ; for 2,058910, which corresponds to the 13th power of a , multiplied by 52700, will produce 108504.

The peace of 1783 prevented the further destruction of men. It may therefore be presumed that the progress of population was the same, or nearly the same, between that year and the year 1790 as between the years 1767 and 1775. Allowing it to be the same, it will be easy to determine the number of people in New-Hampshire in 1783. The difference between 1783, and 1790 is 7. If therefore we divide the number of inhabitants in the year 1790 by the sum corresponding to the 7th power of a , the quotient will be the number in 1783 ; but $\frac{141885}{1474577} = 96220$.

We have here found a 4th number, from which we may determine the progress of population from 1775 to 1783, a period of 8 years. Suppose 82200, the number in 1775, to be equal to 1. Then $a^8 = \frac{96220}{82200} = 1,170559$, the root of which or a , is 1,019880, which being involved to the 8th power, will give the amounts of unity, as in the following :

TABLE III.

years	amounts of unity
1776	$1,019880 = a$
1777	$1,040156 = a^2$
1778	$1,060832 = a^3$
1779	$1,081924 = a^4$
1780	$1,103433 = a^5$
1781	$1,125370 = a^6$
1782	$1,147742 = a^7$
1783	$1,170559 = a^8$

Calculating the number of inhabitants from 1767 to 1775, and from 1783 to 1790, by Table II, and from 1775 to 1788 by Table III, we may form the following Table of Population for New-Hampshire.

TABLE of
Population,

1767	52705
1768	55700
1769	58871
1770	62222
1771	65817
1772	69564
1773	73524
1774	77710
1775	82200
1776	83834
1777	85500
1778	87200
1779	88934
1780	90702
1781	92505
1782	94344
1783	96220
1784	101696
1785	107485
1786	113606
1787	120170
1788	127061
1789	134241
1790	141885

From this table it appears, that the number of inhabitants in New-Hampshire has doubled in *less than eighteen* years : for the half of the number taken by the census, viz. 70942, falls between the years 1772 and 1773.

This conclusion may be considered as very near the truth. But it ought to be observed, that this table of population is not perfectly exact : for the augmentation of numbers in New-Hampshire has undoubtedly arisen, in part, from immigration. It is impossible to determine with precision, what the amount of this immigration is. But we may give a probable conjecture as to the accession of inhabitants, which it has eventually produced. For if we can ascertain the number of years, in which the inhabitants of

the United States, collectively taken, have generally doubled their numbers by natural increase, we shall be furnished with data, by which we may estimate the natural increase of inhabitants in New-Hampshire from the year 1767 to the year 1790, which number being subtracted from the number taken by the census, the remainder will be immigrants, and the natural increase which has arisen from them.

Dr. Wigglesworth supposes that the number of people in the United States is doubled by natural increase in 25 years. Multiplying, therefore, 52700 by $1,89211529=a^{25}$ in his Table the product is 99714, the difference between which and 141885 is 42171.

But I have reason to believe, that the inhabitants of the United States double their numbers, by natural increase, in a less period of time than Dr. Wigglesworth imagines. In a Table, which I have calculated for eight of the United States, viz. New-Hampshire, Massachusetts, Rhode-Island, Connecticut, New-York, New-Jersey, Maryland and Virginia, including Kentucky, I have made a^{22} equal to 2,0291905 ; that is, by this Table, the number of inhabitants in these States, collectively taken, doubled in less than 22 years, during a period ending in the year 1790. Pennsylvania, one of the States not included in the calculation, estimating by the increase of its rateable polls from 1770 to 1786, doubles its numbers in less than 22 years. If this State, therefore, were added, it would render the period of doubling still shorter, as Massachusetts, Rhode-Island and Connecticut, compared with the other States contained in the calculation, increase very slowly, on account of the perpetual emigrations which are made from them. The other States

not included in the calculation are Vermont, Delaware, North-Carolina, South-Carolina, and Georgia, beside the Western Territory. I do not possess sufficient materials, to estimate with accuracy, the progress of population in these States. But it is well known that Vermont, North-Carolina, and Georgia are rapidly increasing. If a calculation could be formed upon the whole of the United States, I am of opinion that it would be found, that, by natural increase, and by emigration from foreign countries, they have actually doubled their numbers in 21 years, notwithstanding the destruction of men by the late war. The accession of foreigners bears no perceptible proportion to the natural increase of nearly four millions of people. Making however a very liberal allowance for it, I think I am justified in concluding, that the natural increase of inhabitants in the United States, may be estimated by the Table above mentioned. In this Table a^{22} is equal to 2,02919050, and a is equal to 1,03296843, consequently a^{23} is equal to 2,09608972. If therefore, we multiply this number by 52700, the number of inhabitants in New-Hampshire, in 1767, the product will be 110463, the number they would have been, by natural increase, in the year 1790; which being deducted from the number taken by the census, the remainder is 31422, which may be considered as the stock formed by immigration and the natural increase arising from it. Making use of the same Table which I have just mentioned, there is no great difficulty in determining the number of immigrants, which New-Hampshire has received, one year with another, for the period of 23 years, ending in 1790. Let z represent this number.

Then $z + za + za^2 + za^3 + za^4 + za^5 + za^6 + za^7 + za^8 + za^9 + za^{10} + za^{11} + za^{12} + za^{13} + za^{14} + za^{15} + za^{16} + za^{17} + za^{18} + za^{19} + za^{20} + za^{21} + za^{22} = 31422$.

That is, in numbers, 33,53096515 $z = 31422$.

Consequently $z = \frac{31422}{37353095615} = 937\frac{1}{11}$

Multiplying this number by 23, the product is 21,553, the amount of immigrations into New-Hampshire in 23 years. As it is your opinion, that the emigrations from the neighbouring States were not so large during the five first years of the war, as before or since, for the sake of a round number, I will suppose that New-Hampshire, during the remaining 18 years, annually received an addition of 1000 persons, beside the children who were born in the course of the year. From these data a more accurate Table of population might be constructed, than that which I have given; but it would not differ so materially from it, as to affect my general conclusion; for the half of the number taken by the census in the year 1790 would still fall between the years '72 and '73. I would therefore consider it as an established fact, that the number of people in New-Hampshire has actually doubled in less than eighteen years.

It is a sentiment which I have heard you express, that there will still continue to be a rapid population in New-Hampshire for many future years. The State at present is thinly settled in proportion to its extent, containing not quite fifteen inhabitants to one square mile. In Connecticut, which is increasing in numbers, there are fifty-one inhabitants to a square mile; and probably as many in Rhode-Island. But there is not so much water and unimproveable land in Connecticut as in New-Hampshire. The latter State you inform us, page 13, contains 9491 square miles; from which, if we

deduct 156 square miles for water, and 480 square miles, for uninhabitable mountains, the remainder is 8855, by which, if we divide 141885, the quotient is 16. The habitable parts of New-Hampshire then contain sixteen inhabitants to a square mile. You have therefore reason to conclude, that the rapidity of its population will not be checked for many years. Presuming that the State will annually receive a thousand immigrants, I will venture to calculate its population from the year 1790 to the year 1800, at or before which time a new census will be taken, by which it will be discovered whether my predictions be just or not.

TABLE of
Population.

1790	141885
1791	147562
1792	153426
1793	159484
1794	165742
1795	172206
1796	178883
1797	185780
1798	192904
1799	200263
1800	207815

Calculated by the Table referred to above;
in which a is equal to 1,03296843, and
1000 added annually for immigrants.

I fear that your patience is now exhausted with my tables. I will not therefore trespass further upon your time, than to add by way of apology, that no calculations can be too minute, which tend to demonstrate the increasing prosperity of a State, the inhabitants of which have so long been distinguished for their bravery and love of freedom.

With sincere respect, I am, dear Sir,
your affectionate brother,

JAMES FREEMAN.

Rev. Jeremy Belknap.

N. B. Since the foregoing letter was received, inquiry has been made of the Secretary whether there be any documents in his office from which the num-

ber of people in New-Hampshire, previous to 1767 can with any probability be ascertained. After spending several days in searching the books and files, the Secretary writes that 'The only numbers of rateable polls to be found in his office from 1742 to 1767 were as follows :

1742—5172, no returns from Nottingham, Barrington and Gosport.

1753—6392.

1767—11964.'

It may be asked, what is the proportion between rateable polls and inhabitants ? If the number of inhabitants as estimated in 1767, viz. 52700 be divided by 11964, the rateable polls, the quotient will be nearly 4-, which gives the proportion for that year. But whether the same will hold for other years is uncertain. New-Hampshire was peculiarly circumstanced in respect of population, for fifteen years preceding and fifteen years succeeding the conquest of Canada in 1760. During the former period the population was very slow, excepting by the natural increase. During the latter the immigration was extremely rapid. It is also to be noted that in the old towns there is a much greater proportion of old men, women and children, than in the new settlements ; consequently the new have more rateable polls in proportion to their numbers than the old towns.

Additions to the Table of Longevity, page 188, lately received.

Since that Sheet was printed, the Rev. Mr. PIKE of Somersworth died, in the 89th year of his age ; and the Rev. PEARSON THURSTON is ordained in that place.

Of the first settlers in Rochester who have died within sixteen years last past the ages were as follows :

Above 100 years		—	1
between	{	90 and 100	— 2
		80 and 90	— 14
		70 and 80	— 20
		60 and 70	— 4
			—
			41

Now living.

between	{	90 and 100	— 1
		80 and 90	— 9
		70 and 80	— 5
			—
			15

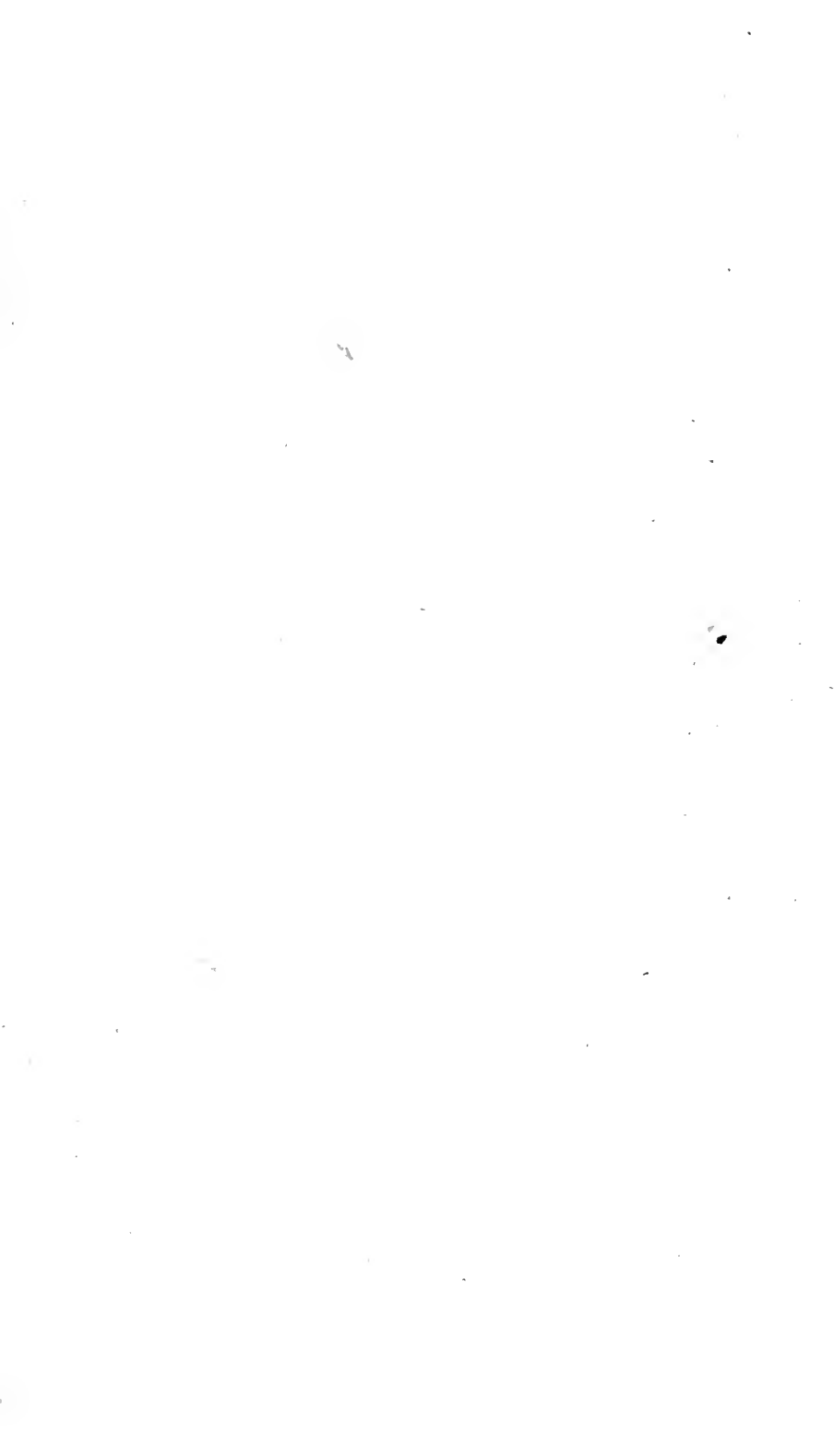
Males 7. Females 8.

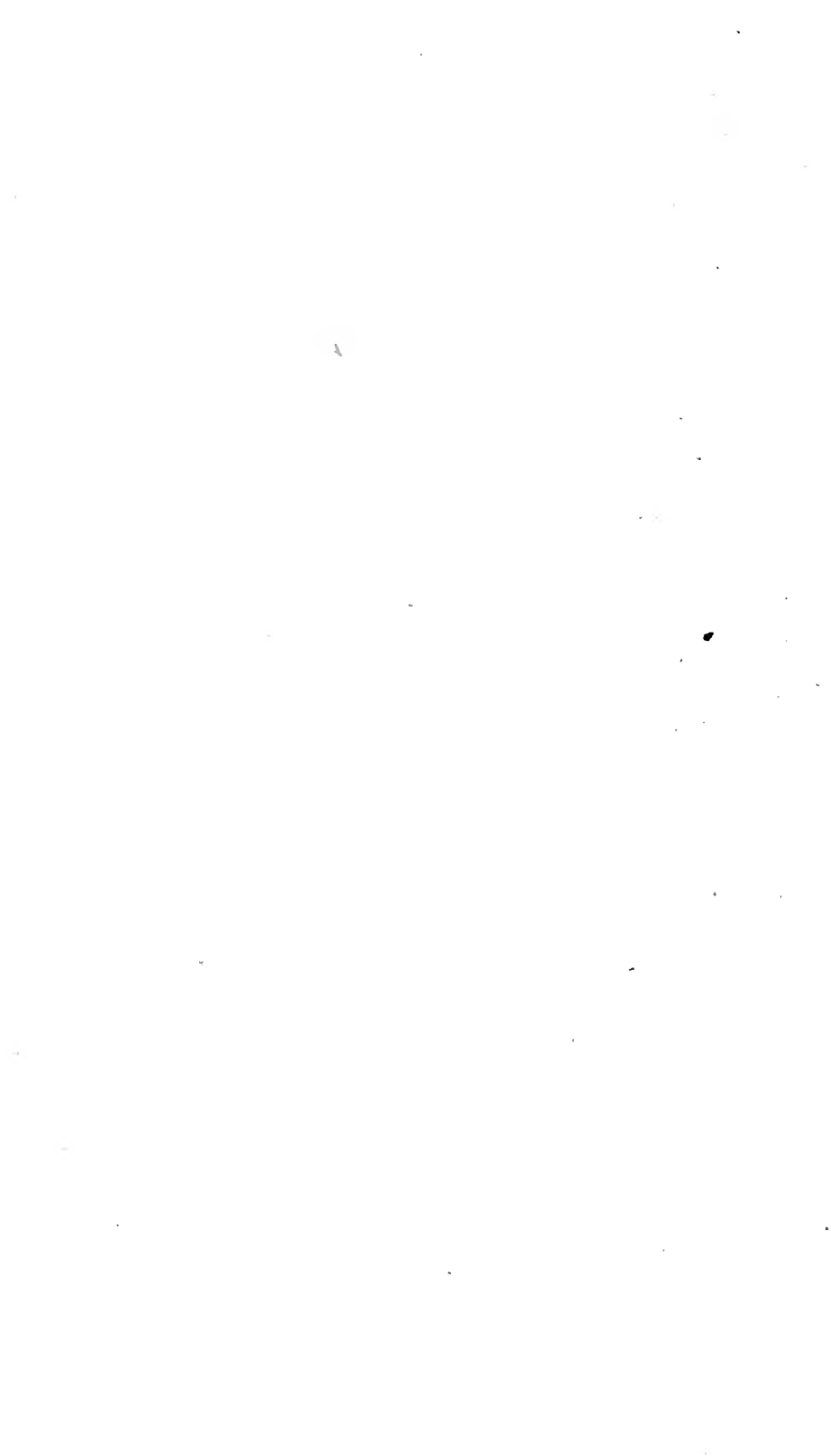
Of the first settlers in Barrington the number now living and their ages are as follows :

between	{	90 and 100	— 1
		80 and 90	— 10
		70 and 80	— 3
			<hr/>
			14

Males 11. Females 3

F I N I S.







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